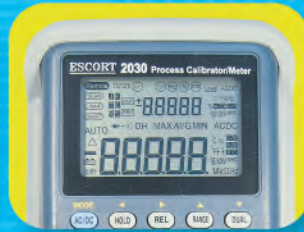


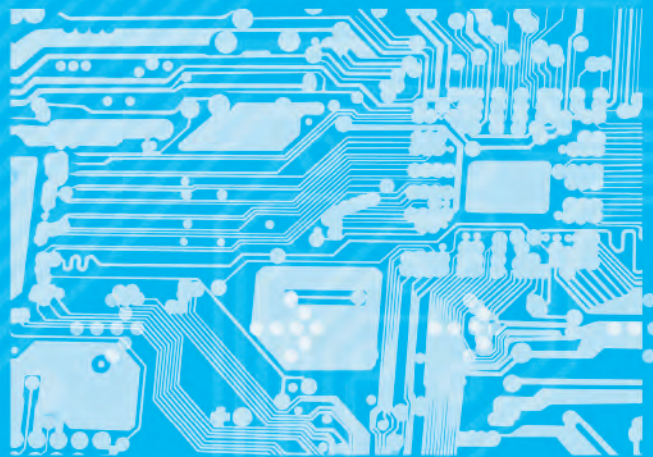
ESCORT

Product Catalogue



2007

Volume 7.1



ESCORT

ABOUT **ESCORT** *YOUR PARTNER FOR TEST AND MEASUREMENT*

Escort Instruments Corporation

Escort Instruments Corporation (EIC) is an ISO-9000:2000 certified company, the first professional Test & Measurement instruments manufacturer in Taiwan established in 1973. EIC has been delivering excellent quality of General Purpose Test Instruments, Process Test Tools, and Automotive Diagnosis Tools under a variety of ODM/OEM labels as well as through its worldwide distribution channels with ESCORT™ brand to more than 80 countries during the past three decades. EIC has 34,000 square feet facility, equipped with modern electronic test equipment in product development, production, Automatic testing, and quality assurance.

Since January in 2002, EIC has deployed an Enterprise Resource Planning (ERP) system to obtain high efficient operations of product data management, order processing, production control, procurement process, finance/accounting system as well as customer support service. With a professional and experienced working team, EIC has won the reputation as a professional high quality manufacturer, and is playing a leading role not only in Taiwan but also in worldwide market of Test & Measurement industry.

In order to maintain a strict quality and a reliability standard, EIC has been taking advantages of the latest state-of-the-art electronic technologies to develop its new products. Furthermore, EIC persists to perform thorough quality verification process before launching its products to the market place to ensure the products are fully qualified to the raw specifications as well as reliable under tough environment with a high confidence level.

EIC was acquired by Schmidt Scientific Taiwan Ltd (SSTL) in October 1998. The new management team brought new concepts to the company especially in the area of core value, employ education program, customer intimacy, and reinforcement of product lines. In addition, all the operation of EIC was merged into Manufacturing Business Division (MBD) of SSTL in December 1999, since then the ESCORT™ has been kept as product brand name.

Effective from July 1st, 2003, the MBD of SSTL has become a re-established independent company "Escort Instruments Corporation" due to reorganization of business direction in SSTL. The major shareholders of new EIC include both key personnel of MBD business management team and Unitech Printed Circuit Board Corporation (<http://www.pcbut.com.tw>) Unitech is a published company in Taiwan stock market as known as a manufacturer, producing leading technologies for high quality double-side, multi-layer PCBs of modern electronic products such as mobile phones, high end IT products, etc.

In EIC, we believe a win/win partnership is a long-term commitment based on integrity and mutual growth. The new management team and all EIC employees are committed to work together with our partners in every possible ways to expand their market share, to maintain their competitiveness in the market place. EIC will be focusing on producing innovative products with creative value to meet customer needs in the ever-changing business environment.

For future, our vision is to continue offering all partners with even more innovative and competitive products and services. We expect to gain profitable growth with our partners and create an in-depth business relationship.

Note: ESCORT™ is a registered trademark of Escort Instruments Corporation.



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EPS-3060TD	30V/6A Triple Output (5V/3A)
EPS-6015SD	60V/1.5A Single Digital Output
EPS-6030D	60V/3A Dual Output
EPS-6030SD	60V/3A Single Digital Output
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Handheld Digital Multimeter Selection Table

Basic features	99	98	179	178	176	172	170	169S	168A	163S
Display Counts	50,000	50,000	10,000	10,000	4,000	3,400	3,400	4,000	2,000	3,200
Basic DCV accuracy	0.025%	0.03%	0.10%	0.50%	0.60%	0.80%	1%	0.30%	0.50%	0.50%
Auto ranging	•	•	•	•	•	•	•	•		•
True RMS	•	•	•							
Measurements										
DC Voltage	1000V	1000V	1000V	1000V	1000V	600V	600V	1000V	1000V	1000V
AC Voltage	1000V	1000V	1000V	1000V	1000V	600V	600V	750V	750V	750V
DC Current	10A	10A	10A	10A	10A	10A	10A	10A	20A	10A
AC Current	10A	10A	10A	10A	10A	10A	10A	10A	20A	10A
Resistance	500MΩ	50MΩ	40MΩ	40MΩ	40MΩ	34MΩ	34MΩ	40MΩ	20MΩ	30MΩ
Capacitance	50mF	50mF	9999μF	9999μF				40μF	20μF	
Frequency	600kHz	600kHz	50kHz			34MHz		1MHz	200kHz	
Frequency Counters	20MHz									
Temperature	•	•	•							
Transistor hFE									•	
Harmonic ratio			•							
Duty cycle/Pulse width	•	•								
dBm	•	•								
Conductance	•	•								
Diode/Continuity	•	•	•	•	•	•	•	•	•	•
% of 4-20mA	•	•	•	•						
% of 0-20mA	•	•								
Display										
Dual display	•	•								
Analog bar graph	•	•	•	•	•	•	•	•		•
Backlight	•	•								
Data storage and exchange										
Min/Max/Avg.	•	•	•	•				•		
Data hold	•	•	•	•	•	•	•	•		•
Relative	•	•	•	•				•		
Peak hold	•	•								
Time stamp	•	•	•							
RS-232 interface	(Infrared)	(Infrared)	optional	optional	optional					
SCPI communication	•	•								
Other features										
Square wave output	•									
Timer out	•									
Auto power off	•	•	•	•	•	•	•	•	•	•
Low battery indication	•	•	•	•	•	•	•	•	•	•
Built-in smart charger design	•	•								
Ez Cal auto Calibrator	• (optional)	• (optional)								
Safety										
Input warning	•	•	•						•	•
IEC1010-1 CAT II			1000V	1000V	1000V	1000V	1000V	1000V		1000V
IEC1010-1 CAT III	1000V	1000V	600V	600V	600V	600V	600V	600V		600V
IEC1010-1 CAT IV	600V	600V								
CE	•	•	•	•	•	•	•	•		

All specifications are subject to be changed by ESCORT without notice.

Handheld Digital Multimeters

EDM-169S / 168A / 163S

Features

- Digital display, Analog bar segments
EDM-169S/163S: 42 segments
- DCV, ACV, DCA, ACA, Resistance
- Capacitance, Frequency (EDM-168A/169S)
- Diode, Audible Continuity
- Transistor hFE (only EDM-168A)
- Relative mode (EDM-169S)
- Data hold (EDM-169S/163S)
- Auto ranging (EDM-169S/163S)
- Data store and recall (EDM-169S)
- Auto power off (EDM-169S/163S)
- Input warning



◀ EDM-169S

EDM-168A

EDM-163S

Ordering Information

Standard Accessories:

Manual, Battery, Test Leads

Optional Accessories:

- EC-170 Soft Carrying Case
- EC-230 Square Soft Carrying Case
- EH-160G Grey Protective Holster
- TH-02 Insulation Piercing Clip piercing insulated wires with small hard PIN, recommend to use with TL-36
- TL-36 Test Leads, Lantern Type probe, 15A/CAT. III 1000V

Specifications	EDM-169S	EDM-168A	EDM-163S
Display Counts	4,000	2,000	3,200
DCV			
Range	400mV, 4V, 40V, 400V, 1000V	200mV, 2V, 20V, 200V, 1000V	320mV, 3.2V, 32V, 320V, 1000V
Resolution	100 μ V	100 μ V	0.1mV
Accuracy	400mV \pm (0.3%rdg + 2dgt) 4V~400V \pm (0.5%rdg + 2dgt) 1000V \pm (0.7%rdg + 2dgt)	\pm (0.5%rdg + 1dgt)	320mV~320V \pm (0.5%rdg + 2dgt) 1000V \pm (0.6%rdg + 4dgt)
ACV			
Range	400mV, 4V, 40V, 400V, 750V	200mV, 2V, 20V, 200V, 750V	3.2V, 32V, 320V, 750V
Resolution	100 μ V	100 μ V	0.001V
Accuracy	50Hz~100Hz 400mV \pm (1.5%rdg + 5dgt) 50Hz~500Hz 4V~750V \pm (1.0%rdg + 5dgt) 500Hz~1kHz 4V~750V \pm (1.5%rdg + 5dgt)	40Hz~400Hz 200mV-750V \pm (1.25%rdg + 4dgt)	50Hz~400Hz 3.2V~320V \pm (1.5%rdg + 5dgt) 750V \pm (1.5%rdg + 5dgt)
DCA			
Range	4mA, 40mA, 400mA, 10A	200 μ A, 2mA, 20mA, 200mA, 20A	320 μ A, 3200 μ A, 32mA, 320mA, 10A
Resolution	1 μ A	0.1 μ A	0.1 μ A
Accuracy	4mA~400mA \pm (1%rdg + 2dgt) 10A \pm (1.5%rdg + 3dgt)	200 μ A-200mA \pm (1.0%rdg + 1dgt) 20A \pm (2.0%rdg + 3dgt)	320 μ A~320mA \pm (1.5%rdg + 2dgt) 10A \pm (2.0%rdg + 3dgt)
ACA			
Range	4mA, 40mA, 400mA, 10A	200 μ A, 2mA, 20mA, 200mA, 20A	320 μ A, 3200 μ A, 32mA, 320mA, 10A
Resolution	1 μ A	0.1 μ A	0.1 μ A
Accuracy	50Hz~1kHz 4mA~400mA \pm (1.2%rdg + 5dgt) 10A \pm (2%rdg + 5dgt)	40Hz-400Hz 200 μ A-200mA \pm (1.5%rdg + 4dgt) 20A \pm (2.5%rdg + 4dgt)	320 μ A~320mA \pm (2.5%rdg + 5dgt) 50Hz~1kHz 10A \pm (2.5%rdg + 5dgt)
Resistance			
Range	400 Ω , 4k Ω , 40k Ω , 400k Ω , 4M Ω , 40M Ω	200 Ω , 2k Ω , 20k Ω , 200k Ω , 2M Ω , 20M Ω	320 Ω , 3.2k Ω , 32k Ω , 320k Ω , 3.2M Ω , 30M Ω
Resolution	0.1 Ω	0.1 Ω	0.1 Ω
Accuracy	400 Ω \pm (1.0%rdg + 4dgt) 4k Ω ~400k Ω \pm (0.7%rdg + 3dgt) 4M Ω \pm (1.0%rdg + 4dgt) 40M Ω \pm (2.0%rdg + 3dgt)	200 Ω \pm (0.75%rdg + 4dgt) 2k Ω -2M Ω \pm (0.75%rdg + 1dgt) 20M Ω \pm (1.5%rdg + 5dgt)	320 Ω ~320k Ω \pm (1.2rdg + 4dgt) 3.2M Ω \pm (1.8%rdg + 4dgt) 32M Ω \pm (2.5%rdg + 4dgt)
Frequency			
Range	1MHz	2K-200KHz	
Resolution	0.01Hz	1Hz	
Accuracy	\pm (0.2%rdg + 4dgt)	\pm (1.0%rdg + 3dgt)	
Capacitance			
Range	4nF~40 μ F	2nF-20 μ F	
Resolution	1pF	1pF	
Accuracy	4nF~400nF \pm (1.0%rdg + 5dgt) 4 μ F \pm (1.2%rdg + 5dgt) 40 μ F \pm (3%rdg + 5dgt)	\pm (2.0%rdg + 4dgt)	
hFE		•	
Continuity	•	•	•
Diode Check	•	•	•
Dimensions (L x W x H)	162 x 77 x 34mm	162 x 76 x 32mm	162 x 77 x 34mm
Weight	0.281kgs	0.27kgs	0.281kgs

All specifications are subject to be changed by ESCORT without notice.

Handheld Digital Multimeters

ESCORT - 179 / 178 / 176 / 172 / 170

Features

- Digital display , Analog bar segments
ESCORT-179/178/176: 41 segments,
ESCORT-172/170: 35 segments
- DCV, ACV, DCA, ACA, Resistance
- Capacitance (ESCORT-179/178)
- Frequency (ESCORT-179/172)
- Diode, Audible Continuity
- Data hold
- Auto ranging
- Auto power off
- Low battery indicator

ESCORT-179/178/176 Only

- Dynamic Recording (MAX/ MIN/ AVG) (ESCORT-179/178)
- Temperature measurement (ESCORT-179)
- Relative mode (ESCORT-179/178)
- Harmonic ratio (ESCORT-179)
- RS-232 (optional) (ESCORT-179/178/176)
- % of 4-20mA display (ESCORT-179/178)
- TRUE RMS in ACV & ACA (ESCORT-179)

Ordering Information

Standard Accessories:

- Manual
- Battery
- Test Leads
- Protective Holster (ESCORT-179/178/176)

Optional Accessories:

- CP-05 RS-232 Package (ESCORT-179/178/176)
- DP-26 K Type Thermocouple Adaptor (ESCORT-179)
- DP-27 K Type Thermocouple Probe (ESCORT-179)
- EC-170 Soft Carrying Case
- EH-170G Grey Holster (ESCORT-172/170)
- TH-02 Insulation Piercing Clip piercing insulated wires with small hard PIN, recommend to use with TL-36
- TL-36 Test Leads, Lantern Type probe, 15A/CAT. III 1000V



ESCORT-179

ESCORT-178

ESCORT-176

ESCORT-172

ESCORT-170

Specifications	ESCORT-179	ESCORT-178	ESCORT-176	ESCORT-172	ESCORT-170
Measuring Rate	3.3 times/sec	3.3 times/sec	1.3 times/sec	1.3 times/sec	1.3 times/Sec
DCV	999.9mV~1000V	999.9mV~1000V	400mV~1000V	340mV~600V	340mV~600V
Basic accuracy	±(0.1%rdg+2dgt)	±(0.5%rdg+2dgt)	±(0.6%rdg+2dgt)	±(0.8%rdg+3dgt)	±(1.0%rdg+3dgt)
Resolution	0.1mV	0.1mV	0.1mV	0.1mV	0.1mV
ACV	999.9mV~1000V	999.9mV~1000V	400mV~1000V	3.4V~600V	3.4V~600V
Basic accuracy	±(1.1%rdg+5dgt)	±(1.2%rdg+5dgt)	±(2%rdg+2dgt)	±(1.2%rdg+3dgt)	±(1.4%rdg+3dgt)
Resolution	0.1mV	0.1mV	0.1mV	0.001V	0.001V
Bandwidth	40~500Hz	40~500Hz	40~500Hz	50~1kHz	50~400Hz
AC measurement	TRUE RMS	AVG	AVG	AVG	AVG
DCA	400μA~400mA, 4A, 10A	400μA~400mA, 4A, 10A	400μA~400mA, 4A, 10A	340μA~340mA, 10A	340μA~340mA, 10A
Basic accuracy	±(0.1%rdg+3dgt)	±(0.2%rdg+3dgt)	±(1.5%rdg+2dgt)	±(1.0%rdg+3dgt)	±(1.2%rdg+3dgt)
Resolution	0.1μA	0.1μA	0.1μA	0.1μA	0.1μA
ACA	400μA~400mA, 4A, 10A	400μA~400mA, 4A, 10A	400μA~400mA, 4A, 10A	340μA~340mA, 10A	340μA~340mA, 10A
Basic accuracy	±(1%rdg+5dgt)	±(1.2%rdg+5dgt)	±(1.2%rdg+2dgt)	±(1.5%rdg+6dgt)	±(1.5%rdg+6dgt)
Resolution	0.1μA	0.1μA	0.1μA	0.1μA	0.1μA
Fuse	0.5A/600V, 10A/600V	0.5A/600V, 10A/600V	0.5A/600V, 10A/600V	0.5A/600V, 10A/600V	0.5A/600V, 10A/600V
Resistance	400Ω~40MΩ	400Ω~40MΩ	400Ω~40MΩ	340Ω~34MΩ	340Ω~34MΩ
Basic accuracy	±(0.5%rdg+3dgt)	±(0.6%rdg+3dgt)	±(0.6%rdg+3dgt)	±(1.2%rdg+3dgt)	±(1.2%rdg+3dgt)
Resolution	0.1Ω	0.1Ω	0.1Ω	0.1Ω	0.1Ω
Capacitance	4,40,400,9999μF	4,40,400,9999μF			
Temperature	T1, T2, ΔT (K/J type)				
Frequency	9,999Hz~50kHz			3.4kHz~34MHz	
Resolution	0.001Hz			0.001kHz	
Recording	MAX,MIN,MAX-MIN,AVG	MAX,MIN,MAX-MIN,AVG			
Power	9V NEDA 1604	9V NEDA 1604	9V NEDA 1604	9V NEDA 1604	9V NEDA 1604
Safety class	IEC-1010-1 600V CAT.III 1000V CAT.II	IEC-1010-1 600V CAT.III 1000V CAT.II	IEC-1010-1 600V CAT.III 1000V CAT.II	IEC-1010-1 600V CAT.III 1000V CAT.II	IEC-1010-1 600V CAT.III 1000V CAT.II
Dimensions (L x W x H)	178 x 83 x 58mm	178 x 83 x 58mm	178 x 83 x 58mm	167 x 77 x 36mm	167 x 77 x 36mm
Weight	0.4kgs	0.4kgs	0.4kgs	0.3kgs	0.3kgs

All specifications are subject to be changed by ESCORT without notice.

Handheld Digital Multimeters

ESCORT-99 / 98

50,000 counts Dual Display TRMS DMM



ESCORT-99



ESCORT-98

Features

- High resolution, Dual Display and Analog Bar graph
- Frequency, Duty Cycle, Pulse Width Measurement
- dBm Measurement with Selectable Impedances
- True RMS (AC or AC+DC)
- % scale readout for mA current
- 1ms Peak Hold
- max/avg/min hold mode
- Relative Mode
- K-type Temperature Measurement
- Audible Continuity
- Backlit Display
- Input Warning
- 51,000 counts, Voltage and current Signal analyse easily
- IEC-1010 CAT. IV 600V/ CAT. III 1000V standards
- Smart Charger design, Built-in Ni-MH rechargeable battery
- SCPI Commands
- Precision True-RMS digital multi-meter
- High Impedance Measurement (50nS/100GΩ)
- J/K Type Thermocouple Measurement (0 °C compensation) (ESCORT-98 only K-type)
- 100kHz (AC+DC) True RMS (ESCORT-99)
- Square Wave Output (ESCORT-99)
- 20MHz Frequency counter (ESCORT-99)

Ordering Information

Standard Accessories:

- Manual
- Test Leads(TL-36-1)
- Grey Protective Holster with Hanging kit(EH-906)
- 9V NI-MH rechargeable Battery (ESCORT-99)
- 9V Carbone zinc Battery (ESCORT-98)

Optional Accessories:

- TW-01 SMD Tweezers
- CP-9899 Communication Package
- EA-98/99 External Adapter for charging purpose
- DP-26 K Type Thermocouple Adaptor
- DP-27 K Type Thermocouple Probe
- Ez Cal Auto Calibration software and test leads
- TH-02 Insulation Piercing Clip piercing insulated wires, recommend to use with TL-36
- TL-36 Test Leads, Lantern Type probe, 15A/CAT. III 1000V
- EC-170 Long soft carrying case
- EC-230 Square soft carrying case
- 9V NI-MH rechargeable Battery

Specifications	ESCORT-99	ESCORT-98
Display		
Display update	3.75 times/sec	3.75 times/sec
Display	Dual Display	Dual Display
Display Counts	1st/2nd: 51,000	1st/2nd: 51,000
Analog Bar graph	21 segments	21 segments
Voltage		
DCV Range	5V-1000V	5V-1000V
Basic accuracy	±(0.025%+5d)	±(0.03%+5d)
DCmV Range	50/500/1000mV	50/500/1000mV
Basic accuracy	±(0.025%+5d)	±(0.03%+5d)
ACV Range	5V-1000V	5V-1000V
Basic accuracy	±(0.4%+25d)	±(0.6%+25d)
Bandwidth	20Hz-100kHz	30Hz-30kHz
Impedances	1.1MΩ, <100pF	1.1MΩ, <100pF
ACmV Range	50/500/1000mV	50/500/1000mV
Basic accuracy	±(0.4%+25d)	±(0.6%+25d)
Current		
DCA Range	500μA-10A	500μA-10A
Basic accuracy	±(0.05%+5d)	±(0.1%+5d)
ACA Range	500μA-10A	500μA-10A
Basic accuracy	±(0.7%+20d)	±(0.8%+20d)
Bandwidth	20Hz-100kHz	30Hz-20kHz
Resistance		
Range	500Ω-500MΩ, 50nS	500Ω-500MΩ, 50nS
Basic accuracy	±(0.05%+5d)	±(0.08%+5d)
Capacitance		
Range	10nF-100mF	10nF-100mF
Basic accuracy	±(1%+5d)	±(1%+5d)
Frequency		
Range	100Hz-600kHz	100Hz-600kHz
Resolution	0.001Hz	0.001Hz
Basic accuracy	±(0.02%+3d)	±(0.02%+3d)
Frequency counter	0.5Hz-20MHz	
Pulse width	0.01-1999.9ms	0.01-1999.9ms
Duty Cycle	0.01%-99.99%	0.01%-99.99%
TRUE RMS	AC+DC	AC
Simultaneous mA and % of scale readout	0-20/4-20mA	0-20/4-20mA
Square wave output	Hz, % Selectable	
dB	dBm, dBV	dBm, dBV
Temperature	J/K (0 °C compensation)	K (0 °C compensation)
Diode/Continuity	•	•
Peak Hold	1ms (single)/250μs (repetitive)	1ms (single)/250μs (repetitive)
Dynamic Recording	Auto/Manual	Auto/Manual
Data hold	Data/Refresh	Data/Refresh
Trigger	Manual/BUS Trigger	Manual/BUS Trigger
Relative mode	•	•
Backlit Display	EL	LED
Auto Power Off	•	•
Input Warning	•	•
Data logging	Module optional	Module optional
Smart charger	•	•
Communication	Infrared (SCPI)	Infrared (SCPI)
Safety class	CAT-III 1000V/CAT-IV 600V	CAT-III 1000V/CAT-IV 600V
Dimension(L x W x H)	192 x 90 x 37 mm	192 x 90 x 37 mm
Weight	940g	940g

All specifications are subject to be changed by ESCORT without notice.

Bench Digital Multimeters

ESCORT-3146A / 3145A / 3136A



Features

ESCORT-3146A/3145A

- 120,000/40,000/4,000 counts selectable
- Dual display
- Vacuum-fluorescent display (VFD)
- True RMS voltage (AC, AC + DC), 20Hz to 100kHz (ESCORT-3146A)
- True RMS voltage (AC, AC + DC), 40Hz to 30kHz (ESCORT-3145A)
- True RMS AC current measurement bandwidth from 20Hz to 10kHz (ESCORT-3146A)
- 2wires/4wires selectable for resistance measurement
- dBm measurements with selectable reference impedance of 2Ω to 8000Ω
- Dynamic recording (MIN/MAX)
- Measurement rate selectable: slow (120,000) 2times/sec, medium(40,000): 5times/sec, fast (4,000) 20times/sec
- Compare (Hi/La/Pass) function for quick in-tolerance test
- Data Hold
- RS-232 Interface
- GPIB Interface (Option), conform to SCPI and IEEE-488.2 standards

ESCORT-3136A

- 50,000 Counts Dual Display
- Vacuum-fluorescent Display (VFD)
- High Performance/Price Ratio
- True RMS (AC, AC + DC), 30Hz to 100kHz ACV, and 30Hz-20kHz ACA Measurement Bandwidth
- Frequency Measurement to 500kHz, 0.01Hz Resolution
- Resistance Measurement from 500Ω to 50MΩ, 10mΩ Resolution
- dBm measurements with variable reference impedance from 2Ω to 8000Ω
- Dynamic Recording (MIN/MAX) with elapsed time
- Compare (Hi/La/Pass) function for quick in-tolerance test
- Percentage function transfers the measuring value to proportional
- Data Hold to freeze displayed value
- Refresh Hold for difficult measuring place
- External trigger a one-time measurement to get the result as your needs
- RS-232 Interface
- GPIB Interface (Option), conform to SCPI and IEEE-488.2 standards



Ordering Information

Standard Accessories:

- 62-25026-3u Spare Current Protection Fuse 2A/250V Fast Blow(ESCORT-3146A)
- 62-25031-1 Spare Current Protection Fuse 250mA/250V Fast Blow(ESCORT-3145A)
- 62-25038-1u Spare Current Protection Fuse 1A/250V Fast Blow(ESCORT-3136A)

Operation Manual

Power cord

Protective holsters (Front and Rear)

TL-36 Test leads, Lantern Type probe, 15A/CAT. III 1000V(ESCORT-3145/6A)

TL-88-1 Test leads (ESCORT-3136A)

Optional Accessories:

- KC-01 4 Wires Test Cable Set With Kelvin Clippers
- RK-01 Rack-mount kit (used for single meter)
- TH-02 Insulation Piercing Clip, recommend to use with TL-36
- TL-36 Test Leads, Lantern Type probe, 15A/CAT. III 1000V
- GP-08-3136A IEEE-488 Interface
- GP-08-3145/46A IEEE-488 Interface
- AC-03 Alligator clips (Red and Black Set)
- CP-08 RS-232 PC Link Software and Cable (ESCORT-3146A/3145A)
- CP-10 RS-232 PC Link Software and Cable (ESCORT-3136A)
- Ez Cal Auto Calibration software and test leads



Specifications	ESCORT-3146A	ESCORT-3145A	ESCORT-3136A
Display Digits	5 1/2 Digit dual display	5 1/2 Digit dual display	4 4/5 Digit dual display
Display Counts	120,000	120,000	50,000
Display Type	Vacuum-fluorescent	Vacuum-fluorescent	Vacuum-fluorescent
DCV			
Range	120mV~1000V	120mV~1000V	500mV~1000V
Basic accuracy	±(0.012%rdg+5dgts)	±(0.02%rdg+5dgts)	±(0.02%rdg+4dgts)
Resolution	1μV~10mV	1μV~10mV	10μV~100mV
ACV			
Range	120mV~750V	120mV~750V	500mV~1000V
Basic accuracy	±(0.2%rdg+100dgts)	±(1.5%rdg+200dgts)	±(0.35%rdg+15dgts)
Resolution	1μV~10mV	1μV~10mV	10μV~100mV
Frequency	20Hz~100kHz	40Hz~30kHz	30Hz~100kHz
DCA			
Range	12mA/120mA/1.2A/12A	12mA/120mA/12A	500μA~20A
Basic accuracy	±(0.05%rdg+5dgts)	±(0.1%rdg+8dgts)	±(0.05%rdg+4dgts)
Resolution	0.1μA~100μA	0.1μA~100μA	10nA~1mA
ACA			
Range	12mA/120mA/1.2A/12A	12mA/120mA/12A	500μA~20A
Basic accuracy	±(0.5%rdg+100dgts)	±(1.5%rdg+200dgts)	±(0.5%rdg+20dgts)
Resolution	0.1μA~100μA	0.1μA~100μA	10nA~1mA
Frequency	20Hz~10kHz	40Hz~5kHz	30Hz~20kHz
dBm			
Basic accuracy	0.1dBm	0.6dBm	0.2dBm
Resolution	0.01dBm	0.01dBm	0.01dBm
Resistance			
Range	120Ω~300MΩ	120Ω~300MΩ	500Ω~50MΩ
Basic accuracy	±(0.05%rdg+5dgts)	±(0.1%rdg+5dgts)	±(0.1%rdg+3dgts)
Resolution	1mΩ~1kΩ	1mΩ~1kΩ	10mΩ~1kΩ
2/4WiresSelectable (Ω)	2Wires/4Wires	2Wires/4Wires	2Wires
Frequency			
Range	1200Hz~1MHz	1200Hz~120kHz	500Hz~500kHz
Basic accuracy	±(0.005%rdg+2dgts)	±(0.01%rdg+3dgts)	±(0.01%rdg+3dgts)
Resolution	0.01Hz~10Hz	0.01Hz~1Hz	0.01Hz~10Hz
Diode	•	•	•
Continuity	•	•	•
DCV Measurement			
Rate (times/sec)	Slow:2 Medium:5 Fast:20	Slow:2 Medium:5 Fast:20	3
True RMS	AC or AC + DC	AC or AC + DC	AC or AC + DC
RS-232	Standard	Standard	Standard
GPIB (IEEE-488)	Option	Option	Option
Power	100V/120V/220V/240Vac±10%, 50/60Hz	100V/120V/220V/240Vac±10%, 50/60Hz	100V/120V/220V/240Vac±10%, 50/60Hz
Safety	CAT.I 1000V/CAT.II 600V	CAT.I 1000V/CAT.II 600V	CAT.II 1000V/CAT.III 600V
Dimensions (L x W x H)	305 x 255 x 105mm	305 x 255 x 105mm	305 x 255 x 105mm
Weight	3kgs Approx.	3kgs Approx.	3kgs Approx.

All specifications are subject to be changed by ESCORT without notice.

Component test meters

EDC-128B, ELC-133A/132A/3133A

Features

EDC-128B Capacitance Sorting meter

- Auto-range, 11000 count resolution and large LCD with dual display.
- Wide range resolution and measurement from 0.1 pF to 199.99 mF.
- Visible and audible Tolerance mode assists you to sort the capacitor.
- Comparison mode with 25 sets for High / Low Limit setting, included non-volatile memory inside, will keep your setting even the power off.
- Static Recording, you will know maximum, average and minimum values without calculator.
- Relative mode will help you to calculate the difference between a standard and a measuring value.
- Data Hold with Manual or Auto Trigger
- Bi-directional optic computer interface with SCPI commands will assist you to a specialist and make report easier.
- Low battery indication
- Overmodeled case, integrated holster
- Brightness LED backlight
- Safe, precision and speed closed case calibration

ELC-133A/132A Handheld Digital LCR meters

- Dual display, 20,000/1,000 counts
- 0.7% Capacitance and Inductance Basic Accuracy
- Auto/Manual Ranging
- Measurement Parameters: L.C.R.D. Q. θ (θ : ELC-133A only)
- Test Frequency: 100Hz/120Hz/1KHz/10KHz selectable (ELC-133A) 120Hz/1KHz selectable (ELC-132A)
- Parallel/Serial test mode
- Tolerance mode (1%, 5%, 10%, 20%) (20%, ELC-133A only)
- Overmodeled case, integrated holster
- Static recording (Max/Min/Avg)
- Self calibration
- External DC power operation
- Relative mode
- Low battery indicator
- Auto power off
- Optical RS-232C interface
- Backlit (ELC-133A only)
- Measurement Ranges:
 - L: 2mH to 1,000H;
 - C: 2,000pF to 10mF;
 - R: 20 Ω to 10M Ω ;
 - Q: .000 to 999 Auto;
 - D: .000 to 999 Auto;
 - θ : $\pm 90^\circ$



EDC-128B ELC-133A/132A

ELC-3133A Bench Digital LCR Meter

- Dual display, 20,000/1,000 counts
- Measurement Parameters: L. C. R. D. θ & Q
- Auto/Manual Ranging
- 0.3% Basic Accuracy
- Test Frequency: 100Hz/120Hz/1K/10KHz
- Parallel/Serial test mode
- Data Logging (max, min, avg)
- Tolerance mode (1%, 5%, 10%, 20%)
- Optical RS-232 interface
- Data Processing Software for Windows(optional)
- TW-02 SMD Tweezers(Optional)



ELC-3133A

Ordering Information

EDC-128B, ELC-133A/132A/3133A Standard Accessories:

Manual(ELC-133A/132A),
 Quick start guide(EDC-128B, ELC-3133A)
 Instruction manual in CD-ROM(EDC-128B, ELC-3133A)
 TL-23 Alligator clip Test Leads (EDC-128B, ELC-133A/132A)
 TL-20 Test alligator clips with BNC (Pair)(ELC-3133 only)
 Alkaline 9V Battery
 AC power cord(ELC-3133A only)

Optional Accessories:

EA-55 AC 220V, 12V/50mA Adaptor
 EA-112 AC 120V, 12V/50mA Adaptor
 EH-80G Grey Protective Holster
 EC-170 Soft Carrying Case(EDC-128B, ELC-133A/132A)
 CP-128B Communication package.
 CP-09 Communication Package (Disk + RS-232 Cable)(ELC-133A/132A/3133A)
 CP-133A Communication Package(Disk + USB Cable)(ELC 132A/133A/3133A)
 TW-01 SMD Tweezers (EDC-128B, ELC-133A/132A)
 TW-02 SMD Tweezers (ELC-3133A)

Specifications	ELC-3133A	ELC-133A	ELC-132A	EDC-128B
Ranging Mode	Auto & Manual Ranging	Auto & Manual Ranging	Auto & Manual Ranging	Auto & Manual Ranging
Test Frequency	100/120/1KHz/10KHz	100/120/1KHz/10KHz	120/1KHz	Auto & Manual Ranging
Resistance				
Range	20 Ω ~10M Ω	20 Ω ~10M Ω	20 Ω ~10M Ω	
Accuracy	100/120/1KHz: $\pm(0.3\%rdg+2dgt)$ 10KHz: $\pm(0.6\%rdg+5dgt)$ Resolution 0.001 Ω ~0.001M Ω	100/120/1KHz: $\pm(0.5\%rdg+3dgt)$ 10KHz: $\pm(1.5\%rdg+5dgt)$ 0.001 Ω ~0.001M Ω	120/1KHz: $\pm(0.5\%rdg+3dgt)$ 0.001 Ω ~0.001M Ω	
Capacitance				
Range	200pF~10mF	200pF~10mF	2000pF~10mF	1000.0pF,10.000nF,100.00nF,1000.0nF,10.000 μ F,100.00 μ F,1000.0 μ F,10.000mF,199.99mF
Accuracy	100/120/1KHz: Cx: $\pm(0.4\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.4\%rdg+100/Cx+5dgt)$, DF<0.5 10KHz: Cx: $\pm(1.0\%rdg+5dgt)$, DF<0.5 DF: $\pm(1.0\%rdg+100/Cx+6dgt)$, DF<0.5 0.01pF~0.01mF	100/120/1KHz: Cx: $\pm(0.7\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Cx+5dgt)$, DF<0.5 10KHz: Cx: $\pm(1.5\%rdg+5dgt)$, DF<0.5 DF: $\pm(1.5\%rdg+100/Cx+6dgt)$, DF<0.5 0.01pF~0.01mF	120/1KHz: Cx: $\pm(0.7\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Cx+5dgt)$, DF<0.5 0.1pF~0.01mF	1000.0pF: $\pm(1\%+10)$; 1000.0nF, 10mF: $\pm(1\%+5)$; 100.00nF~1000.0 μ F: $\pm(0.5\%+3)$; 199.99mF: $\pm(2\%+5)$ 0.1pF~0.01mF
Inductance				
Range	2000 μ H~1000H	2000 μ H~1000H	2000 μ H~1000H	
Accuracy	100/120/1KHz: Lx: $\pm[0.3\%rdg+(Lx/10000)\%+5dgt]$, DF<0.5 DF: $\pm(0.8\%rdg+100/Lx+5dgt)$, DF<0.5 10KHz: Lx: $\pm[0.6\%rdg+(Lx/10000)\%+8dgt]$, DF<0.5 DF: $\pm(1.5\%rdg+100/Lx+10dgt)$, DF<0.5 0.1 μ H~0.1H	100/120/1KHz: Lx: $\pm[0.7\%rdg+(Lx/10000)\%+5dgt]$, DF<0.5 DF: $\pm(1.2\%rdg+100/Lx+5dgt)$, DF<0.5 10KHz: Lx: $\pm[1.5\%rdg+(Lx/10000)\%+8dgt]$, DF<0.5 DF: $\pm(2\%rdg+100/Lx+10dgt)$, DF<0.5 0.1 μ H~0.1H	120/1KHz: Lx: $\pm[0.7\%rdg+(Lx/10000)\%+5dgt]$, DF<0.5 DF: $\pm(1.2\%rdg+100/Lx+5dgt)$, DF<0.5 0.1 μ H~0.1H	
Dissipation factor	.000~999 Auto	.000~999 Auto	.000~999 Auto	
Quality factor	.000~999 Auto	.000~999 Auto	.000~999 Auto	
θ Measurement	$\pm 90^\circ$	$\pm 90^\circ$	$\pm 90^\circ$	
Tolerance mode	1%, 5%, 10%, 20%	1%, 5%, 10%, 20%	1%, 5%, 10%	1%, 5%, 10%, 20%
RS-232 interface	standard	standard	standard	standard
Dimensions (LxWxH)	211 x 260x 71mm	182 x 85 x 40mm	182 x 85 x 40mm	192 x 90 x 37 mm
Weight	1.6kgs	0.3kgs	0.3kgs	0.39kgs

All specifications are subject to be changed by ESCORT without notice.

Clamp-On Meters

ECT-689/ECT-680

Features

- 1000A AC/DC (ECT-689), 1000A AC (ECT-680)
- Dual Display, Auto Ranging
- Jaw opening 50.8mm (ECT-689), 52mm (ECT-680)
- True RMS Voltage and Current 1000V/1000A
- Δ T measurement (ECT-689)
- Capacitance Measurement Range 400μF and 4000μF (ECT-689)
- Resistance with Audible Continuity Range 400Ω and 4kΩ
- Dual display for Voltage (or Current)/ Frequency
- Diode check (ECT-680)
- Continuity & Beeper
- 1 ms Peak hold
- Dynamic Recording (MAX, MIN, AVG)
- Data Hold, Refresh Hold
- Relative Mode
- Auto Power Off functions
- IEC-1010-1 600V CAT. III/1000V CAT. II

Ordering Information

Standard Accessories:

Manual,
Alkaline 9V Battery
Soft Carrying Case(EC-600)

Optional Accessories:

DP-26 K-type Thermocouple adapter used with DP-27(ECT-689)
DP-27 K-type Thermocouple-Bead Probe with Teflon tape insulation(ECT-689)
DP-36 Dual Input Adaptor for Temperature (ECT-689)
TL-88-1 Test Leads with UL/CE Approval (a pair)



CE ECT-689

CE ECT-680

Specifications	ECT-689	ECT-680
Maximum Current	1000A AC/DC	1000A AC
Display Counts	4,000/10,000 counts	4,000/10,000 counts
Analog Bar Graph	12 Segments	12 Segments
Ranges Selection	Auto / Manual	Auto / Manual
Measuring Rate	3.3 Times / Second	3.3 Times / Second
Dual Display	°F and °C	V and Hz, A and Hz
Dynamic Recording	MAX, AVG, MIN Recording	MAX, AVG, MIN Recording
Data Hold	Data Hold / Refresh Hold	Data Hold / Refresh Hold
Relative mode(ZERO)	•	•
Auto power off/Sleep mode	•	•
Low Battery indicator	•	•
True RMS	•	•
DCV		
Range	400V, 1000V	400V, 1000V
Resolution	100mV, 1V	100mV, 1V
Accuracy	400V ±(1%rdg+3dgt) 1000V ±(1%rdg+3dgt)	400V ±(1%rdg+3dgt) 1000V ±(1%rdg+3dgt)
ACV		
Range	400V, 1000V	400V, 1000V
Resolution	100mV, 1V	100mV, 1V
Accuracy	45~400Hz ±(1.5%rdg+3dgt)	45~400Hz ±(1.5%rdg+5dgt)
DCA		
Range	400A, 1000A	400A, 1000A
Resolution	0.1A, 1A	0.1A, 1A
Accuracy	400A ±(1.5%rdg+3dgt) 1000A ±(2%rdg+5dgt)	400A ±(1.2%rdg+5dgt) 400A~700A ±(1.5%rdg+5dgt) 700A~1000A ±(2.5%rdg+5dgt)
ACA		
Range	400A, 1000A	400A, 1000A
Resolution	0.1A, 1A	0.1A, 1A
Accuracy	40Hz~65Hz 400A ±(2%rdg+5dgt) 40Hz~65Hz 1000A ±(2.5%rdg+5dgt) 65Hz~2kHz 400A, 1000A ±(3%rdg+5dgt)	40~65Hz 400A ±(1.2%rdg+5dgt) 400A~700A ±(1.5%rdg+5dgt) 700A~1000A ±(2.5%rdg+5dgt) 65~400Hz 400A ±(2%rdg+5dgt) 400A~700A ±(3%rdg+5dgt) 400~1000Hz 400A ±(4%rdg+5dgt) 400A~700A ±(5%rdg+5dgt)
Resistance		
Range	400Ω, 4KΩ	400Ω, 4KΩ
Resolution	0.1Ω, 1Ω	0.1Ω, 1Ω
Accuracy	±(1%rdg+3dgt)	±(1%rdg+3dgt)
Temperature		
Range	-40°C~1372°C -40°F~2502°F	
Resolution	1°C, 1°F	
Accuracy	±(0.5%rdg+3°C), ±(0.5%rdg+6°F)	
Capacitance		
Range	400μF, 4000μF	
Resolution	0.1μF, 1μF	
Accuracy	400μF ±(3%rdg+4dgt) 4000μF ±(3.5%rdg+4dgt) > 2mF, No SPEC.	
Frequency		
Range		100Hz, 1kHz
Resolution		0.01Hz, 0.1Hz
Accuracy		±(0.2%rdg+4dgt)
Diode Test		•
Continuity & Beeper	•	•
Safety class	IEC-1010-1 600V CAT. III / 1000V CAT. II	IEC-1010-1 600V CAT. III/ 1000V CAT. II
Maximum Jaw Opening	2"(50.8mm)	2.04"(52mm)
Dimensions (L x W x H)	260 x 64 x 32mm	273 x 64 x 32mm
Weight	0.78kgs	0.86kgs

All specifications are subject to be changed by ESCORT without notice.

Process Tools

ESCORT-2030/898

Process Calibrator/MultiMeters

ESCORT-2030 Features

Calibrator Features

- Simultaneously source/simulate and measure on large dual display.
- Constant current output for loads up to 1200Ω
- Precision 0.03% accurate voltage and current calibration source.
- Bipolar current ($\pm 25\text{mA}$) and voltage ($\pm 1.5\text{V}$, $\pm 15\text{V}$) outputs.
- Simultaneously source excitation voltage and measure mA output of 2-wire transmitters.
- Wide range Frequency (square wave) source with adjustable amplitude, Duty Cycle, Pulse Width.
- Programmable 16 continuous or timed step outputs, or 999 step ramp.

DMM Features

- Measure DCmA, ACmA, DCV, ACV, AC+DC, Temperature, Frequency, Duty Cycle, Pulse Width, Continuity, Resistance and Diode
- $1\mu\text{V}$ or $1\mu\text{A}$ resolution and 0.03% basic DCV accuracy(500mV-250V)
- 1 ms Peak Hold for glitch capture, plus Data Hold, Auto Hold, relative and dynamic recording.
- True RMS measurement for non-linear voltage and current loads

Special Features

- Large 50,000 count backlit LCD displays
- Primary, secondary displays with source/measure ranges and functions selectable.
- Separate input/output banana jacks with fused protection
- Auto power off with disable function
- Come with input/output test leads, NiMH rechargeable battery, 100V-250V AC adaptor, Battery charger and pouch case

Optional Features

- Ez Cal auto Calibration Software
- Windows based software for remote operation, data acquisition and documentation by Bi-directional communications package (including optical-isolated cable for RS-232C to USB and software)

ESCORT-898 Features

Calibrator Features

- 24V Loop power supply with loop current monitor
- 1,200Ω drive capability for 20mA source/ simulation.
- The % scale readout for 4-20mA or 0-20mA measurement and output
- Fast mA Span Check buttons to set 0% and 100% mA output
- Intelligent Output and Standby control
- Simultaneous mA and % of scale readout
- You are the master to Coarse or Fine turn for outputs
- Adjustable steps and time interval for Auto Scan
- Adjustable resolutions and span for linear Ramp output.

DMM Features

- 50,000 counts, dual display precision True-RMS digital multi-meter
- Frequency, Duty cycle and Pulse width measurements.
- Diode and Audible Continuity Test
- Temperature test with the optional of 0°C compensation
- Dynamic Recording for Min/Max/Average
- Data Hold with Manual or Auto Trigger and Relative modes

Special Features

- Built-in rechargeable battery
- Brightness EL backlight
- Bi-directional optic computer interface with SCPI commands
- Safe, precision and speed closed case calibration
- Designed to meet IEC-1010 CAT. IV 600V/ CAT. III 1000V standard

Optional Features

- Ez Cal auto Calibration Software
- Windows based software for remote operation, data acquisition and documentation by Bi-directional communications package (including optical-isolated cable for RS-232 to USB and software)

Ordering Information

ESCORT-2030

Standard Accessories:

Manual	
61-25032-2	4 sets of battery pack (1.2V AA x2) rechargeable batteries
TL-88-1	Test Leads with UL/CE Approval (a pair)
P/N:30-25283-1/2	Alligator Clip (a pair)
P/N:30A-25641-1/2	Alligator Test Leads
P/N:30A-25004-1	Special Yellow Test Leads
P/N:63-2708-1B	External Adaptor
P/N:29B-25077-1	Carry Case
EH-2000G	Grey Protective Holster with Hanging kit

Optional Accessories:

CP-2030	Communication package
DP-26	K Type Thermocouple
DP-27	K Type Bead Probe (miniature)
TP-01	K Type Bead Probe (lantern terminals)
Ez Cal	Auto Calibrator Software and test leads
TH-02	Insulation Piercing Clip piercing insulated wires with small hard PIN, recommend use with TL-36
TL-36	Test Leads, Lantern Type probe, 15A/CAT. III 1000V



ESCORT-2030

Ordering Information

ESCORT-898

Standard Accessories:

Manual	
Soft carrying case	
EH-90G	Grey Protective Holster with Hanging kit
TL88-1	UL/CE Approval Test leads.(red/black)
TL-21	Alligator clip leads
61-25035-1	9V Ni-MH(Nickel-Metal Hydride) rechargeable batteries
EA-9899	External Adaptor for charging purpose

Optional Accessories:

CP-898	Communication package included full isolation optical cable and software disc.
DP-26	miniature transition adapter
DP-27	K Type Thermocouple-Bead Probe with Teflon tape
TP-01	K-type bead probe (lantern terminals)
Ez Cal	Auto Calibration Software and test leads
TH-02	Insulation Piercing Clip piercing insulated wires with small hard PIN, recommend use with TL-36
TL-36	Test Leads, Lantern Type probe, 15A/CAT. III 1000V



ESCORT-898

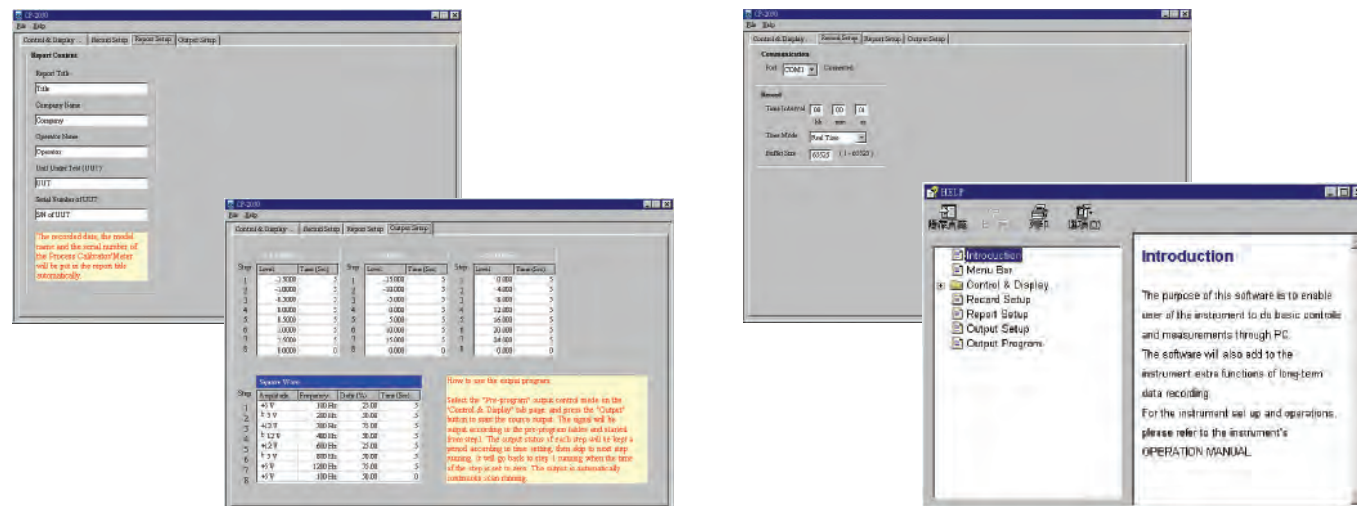
Process Tools

ESCORT-2030/898

Process Calibrator/MultiMeters

Optional Features

Windows based software for remote operation, data acquisition and documentation by Bi-directional communications package (including optical-isolated cable for RS-232 to USB and software)



Specifications	ESCORT-2030	ESCORT-898
Output function		
Signal(output)/measure(input)	Simultaneous	separate
Constant voltage output		
Range	±1.5V, ±15V	loop power 24V
Accuracy	±(0.03%+3d)	±(0.03%+5d)
Resolution	0.1mV, 1mV	
Constant current output		
Range	±25mA	0~25mA
Max. load	12V (500Ω)	24V (1200Ω)
Accuracy	±(0.03%+5d)	±(0.03%+5d)
Resolution	1μA	1μA
Frequency source		
Waveform type	Square	
Range	0.5~4800 Hz	
Amplitude	5, 12, ±5, ±12 V	
Pulse width variation	1/freq.*256	
Duty cycle variation	0.39%~99.60%/step	
Memory Generation		
Scan	16 step	Adjustable steps
Ramp	999 step	999 step
Input function (multi-meter)		
Display counts	50,000	50,000
True RMS	AC+DC	AC
DCV Range	50mV~250V	50mV~1000V
Accuracy	±(0.03%+50)	±(0.03%+5)
ACV Range	50mV~250V	50mV~1000V
Accuracy	±(0.7%+20)	±(0.7%+15)
DCA Range	50mA/500mA	50mA/1000mA
Accuracy	±(0.03%+5)	±(0.03%+5)
ACA Range	50mA/500mA	50mA/1000mA
Accuracy	±(0.6%+20)	±(0.5%+30)
Resistance	500Ω~50MΩ	500Ω~50MΩ
% Scale for mA readout	0-20/4-20 mA	0-20/4-20 mA
Diode/ audio continuity	•	•
Frequency	1Hz~200kHz	1Hz~200kHz
Pulse width	0.2~1999.9ms	0.2~1999.9ms
Duty cycle	0.1%~99.9%	0.01%~99.99%
Temperature(K type)	0°C compensation	0°C compensation
1 ms peak hold	•	•
Dynamic Recording	Auto/Manual	Auto/Manual
Data Hold	Data/Refresh hold(Trigger)	Data/Refresh hold(Trigger)
Backlit display	EL	EL
Auto power off	off/1~99min.	off/1~99min.
Communication	Infrared (SCPI)	Infrared (SCPI)
Battery	1.2Vx8 Ni-MH rechargeable battery	9V Ni-MH rechargeable batteries
Safety	CAT. II 250V	CAT. IV 600V/III 1000V
Dimension(L x W x H)	192 x 90 x 54 mm	192 x 90 x 37 mm
Weight	1.71kg with standard Accessories	650g(meter/holster)1360g(include all accessories)

All specifications are subject to be changed by ESCORT without notice.

Data Recorder

ESCORT - 3016B / 3008B

Features

ESCORT-3016B series High performance Recorder

- 6 to 36 channels
 - With up to 3 modules that can be added or exchanged
 - Universal inputs
 - The easiest to use recorder, backed by Linux operating system
 - Excellent quality real-time graphical display
 - DC Voltage, TRMS AC+DC, Frequency, Thermocouples, PT100.
 - 16 logic channels
 - 16 Bit resolution
 - Color LCD TFT screen (12")
 - Max. sampling frequency: 1MS/s per channel
 - Bandwidth: 100 kHz
 - Memory: 32 M word
 - Internal hard disk: 40 GB
 - Interface: USB, VGA, Ethernet
 - ESCORT View software displays graphs on your PC as well as export to a spreadsheet (Excel™) or word processor (Word™).
 - Flexpro software (option) for powerful analysis with over 100 functions
 - IEC 1010-CAT III-600V
- * optional

ESCORT-3008B series Thermal Recorder

- 6 to 36 channels
 - Universal inputs
 - Can be configured with 2 input boards, a universal input board with 6 channels and a universal multiplexed board with 12 channels.
 - DC Voltage, TRMS AC+DC, Frequency, Thermocouples, PT100.
 - 16 logic channels
 - 16 Bit resolution
 - Color LCD TFT screen (12")
 - 270mm paper width
 - Max. sampling frequency: 1MS/s
 - Bandwidth: 100 kHz
 - Memory: 32 M word
 - Internal hard disk: 40 GB
 - With new "plug-in" system for input boards, you can install your channel extension without factory return of the recorder.
 - With new man machine interface under Linux operating system
 - An Help menu for each function
 - Offer direct record on the internal hard disk, with 100 kHz rate and 6 channels simultaneously.
 - Flexpro software for data analysis and report
 - ESCORT View software for display on your PC
 - Interface: USB, XGA, RS-232, Ethernet.
- * optional



ESCORT-3016B

ESCORT-3008B

Ordering Information

ESCORT-3016B/ESCORT-3008B

Standard Accessories:

User's manual	
. 1 mains cable	241510312
. 1 male 25-pin connector	214200250
. 1 connector cap	214299014
. 1 mouse	984206000
1 roll of paper: 30 m(only for ESCORT 3008B)	837500504

Accessory with 6 isolated channels module :

. 1 black single-pin plug per channel	215508020
. 1 red single-pin plug per channel	215508021

Accessory with 12 non-isolated channels module :

. 1 screw terminal 5-pins per channel	315018045
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Optional Accessories:

30m roll of paper (standard)	837500504
long life 30m roll of paper	837500510
high sensitivity 30m roll of paper	837500521
pre-cut A4 roll of paper	837500522
Kit of supplementary items for isolated 6 channels module	984010000
Kit of supplementary items for non-isolated 12 channels module	984402100
Transport case	984167000
19" rack	984208000
PC type mouse PS2	984206000
PC AZERTY type keyboard PS2	910009300
0.01Ω 1% 3A plug-in shunt	910007100
0.1Ω 1% 1A plug-in shunt	910007200
1Ω 0.1% 0.5A plug-in shunt	989006000
50Ω 0.1% 0.05A plug-in shunt	989007000
0.01Ω 0.5% 30A external (plugs)	207030301
0.001Ω 0.5% 50A external (clips)	207030500
ordinary Ethernet cable	298505110
basic FLEXPRO software	910008100
complete FLEXPRO software	910008200

Specifications	ESCORT-3016B	ESCORT-3008B
Number of Channels	6, 12, 18, 24, 30, 36	6, 12, 18, 24, 30, 36
DC voltage	1mV to 1000V	1mV to 1000 V
TRMS AC+DC voltage	200mV to 500V	200mV to 500V
bandwidth	(-3dB) 5Hz to 500Hz	(-3dB): 5Hz to 100Hz
Frequency		
Sensitivity	300mV rms min	300mV rms min.
Temperature	Thermocouple: J,K,T,S,B,E,N,W5 & PT100	Thermocouple: J,K,T,S,B,E,N,W5 & PT100
Sampling		
Resolution	14 Bits	14 Bits
Sampling rate	1Ms/s per channel	1MS/s per channel
Memory lenght	32Mw in segments of up 128 blocks	32 Mw in segments of up to 128 Blocks
Triggering	positive edge, negative edge, on logical input, delay, Go No Go	positive edge, negative edge, on logical input , Go No Go
logical inputs		
Number of channels	16	16
Visualisation	12" TFT screen	12" TFT screen
Storage		
Setup backup	16 named in RAM	16 named in RAM
Internal hard disk	40 GB	40 GB
Interfaces	4 USB ports, VGA, Ethernet	USB ports, VGA, Ethernet
power Supply	85VAC to 264VAC, 47Hz to 63Hz	85VAC to 264 VAC, 47Hz to 63 Hz
Dimensions & weight	384 x 445 x 195, 11 Kg	384 x 445 x 195, 11 Kg
Safety	EC 1010 CAT III, 600V	IEC 1010 CAT III, 600V

* optional

All specifications are subject to be changed by ESCORT without notice.

Data Recorder

ESCORT - 3004B / 3002

Features

ESCORT-3004B series Economical Recorder

- 6 analogue channels
 - Universal isolated inputs
 - The easiest to use recorder, backed by Linux operating system
 - Excellent quality real-time graphical display
 - DC Voltage, TRMS AC+DC, Frequency, Thermocouples.
 - 16 logic channels
 - 14 Bit resolution
 - Color LCD TFT screen (12")
 - Max. sampling frequency: 1MS/s per channel
 - Bandwidth: 100 kHz
 - Memory: 32 M word
 - Internal hard disk: 40 GB
 - Interface: USB, XGA, Ethernet
 - ESCORT View software displays graphs on your PC as well as export to a spreadsheet (Excel™) or word processor (Word™).
 - Flexpro software* for powerful analysis with over 100 functions
 - IEC 1010-CAT III-600V
- * optional

ESCORT-3002 RECORDER 1MS/s Sampling

- 2 channels and 8 logical channels
- 12 bits resolution/sampling : 1MS/s
- Recorder, multimeter and oscilloscope mode
- 2 isolated input multimeter
- 17 mathematical functions to help you analyzing complex waveform
- 100 kHz bandwidth
- 2 isolated channels input multimeter
- Mass storage capacity (compact flash interface)
- Calculation functions and mathematical combination of channels
- RS-232C interface for external printer
- Power supply for external sensors
- High safety level : IEC1010, CAT.III - 600V
- PC software : ESCORT View (Windows compatible)



NEW

ESCORT-3004B



NEW

ESCORT-3002

Ordering Information

ESCORT-3004B

Standard Accessories:

User's manual	
Help CD with software and notices	
. 1 mains cable	241510312
. 1 male 25-pin connector	214200250
. 1 connector cap	214299014
. 1 mouse	984206000
. 1 black single-pin plug per channel	215508020
. 1 red single-pin plug per channel	215508021

Optional Accessories:

Kit of supplementary items for isolated 6 channels module	984010000
Transport case	984167000
19" rack	984208000
PC type mouse PS2	984206000
PC AZERTY type keyboard PS2	910009300
0.01Ω 1% 3A plug-in shunt	910007100
0.1Ω 1% 1A plug-in shunt	910007200
1Ω 0.1% 0.5A plug-in shunt	989006000
50Ω 0.1% 0.05A plug-in shunt	989007000
0.01Ω 0.5% 30A external (plugs)	207030301
0.001Ω 0.5% 50A external (clips)	207030500
ordinary Ethernet cable	298505110
basic FLEXPPO software	910008100
complete FLEXPPO software	910008200

ESCORT-3002

Standard Accessories:

An external power supply with a power lead.
A bag containing 2 red and 2 black banana plugs
One set of test leads.
A user manual.
A CD ROM containing the user manual and the ESCORT View software allowing you to exploit the acquired data on a PC.
ESCORT also proposes their more complete Flexpro® software as an option.

Optional Accessories:

Please contact our local distributor for detail information.

Specifications	ESCORT-3004B
Number of Channels	6
DC voltage	1mV to 1000V
TRMS AC+DC voltage	200mV to 500V
bandwidth	(-3dB) 5Hz to 500Hz
Frequency	
Sensitivity	300mV rms min
Temperature	Thermocouple: J, K, T, S, B, E, N, W5
Sampling	
Resolution	14 Bits
Sampling rate	1MS/s per channel
Memory length	32Mw in segments of up 128 blocks
Triggering	positive edge, negative edge, on logical input, delay, Go No Go
logical inputs	
Number of channels	16
Visualisation	12" TFT screen
Storage	
Setup backup	16 named in RAM
Internal hard disk	40 GB
Interfaces	4 USB ports, VGA, Ethernet
Auto measure	20 automatic measurements (F, T, Vpp, Tm.....)
power Supply	85VAC to 264VAC, 47Hz to 63Hz
Dimensions & weight	384 x 445 x 195, 11 Kg
Safety	EC 1010 CAT III, 600V

Specifications	ESCORT-3002
Channels	2 analog and 8 logical channels
Voltage Inputs	1 mV to 200 VDC/div and 10 mV to 200 V/div for TRMS
Current Inputs	using external shunt*
Temperature	thermocouples J, K, T, S, B, E, N, W5
Resolution	12 bits
Frequency meter	20 Hz to 30 KHz
Sampling freq.	1 MS/s per channel max.
Memory	1 Mword, in 128 blocks max.
Triggering	edge +, -, window, slope, GoNoGo, delay, logical channel
Bandwidth	100 KHz
Filters	programmable
input impedance	25 MΩ min. (range <= 200 mV), 2MΩ (range >200 mV)
Auto measure	F, T, Vpp, Vmax (17 functions)
Multimeter Mode	2 input, 4 digits, 10μV resolution, DC and AC TRMS
Oscilloscope Mode	2 channels, Autoselect Timebase 50μs to 20 ms/div
Storage	Compact flash card*
Interface	RS-232C for printer, Compact flash
Display	LCD B&W, backlighted
Power supply	9V DC on jack
Dimensions (L x W x H)	210 (H) x 170 (L) x 80 (P)mm
Weight	aprox. 1 kg

* optional

All specifications are subject to be changed by ESCORT without notice.

DATA LOGGER

ESCORT 1500 series Data Logger

Features

- Twelve bit resolution offers a high measurement accuracy
- Housing designed to NF EN 60068-2-27 1987 standards
- Two visual indicators instantly show if pre-set temperature limits are exceeded. Alarm output
- UL and CE approved
- DATA LOGGER allows data acquisition on PC in real time
- ESCORT 1501 is designed to measure temperature in high humidity conditions, Watertight to IP 68
- ESCORT 1541 and 1545-K record when the bonding cable is detached
- The large memory depth allows non-stop data acquisition for up to two years. Recorded values are recovered at any time without stopping the recording
- Windows™ based software for easy data collection and analysis
- Data export to Microsoft® EXCEL® file.
- Measurements in real time.
- Data safety: Coded files - user password
- Two alarms : alarms configuration by threshold (in voltage, in internal and external temperature)

Escort 1511-PT

Escort 1511-PT1

- In order to guarantee the best accuracy, both models are equipped with a PT100 three wires input, for measurements from -50°C to +150°C (model 1511-PT) and from -200°C to +850°C (model 1511-PT1).

Escort 1520-K

- For all your applications dealing with temperature and climatic systems control. This model is equipped with external temperature input, for measurements from -50°C to +150°C.

Escort 1522-K

- Dedicated to temperature control, this model provides two inputs temperature by "K" type thermocouple. It allows to record temperature deltas between two points.

Escort 1530-K1

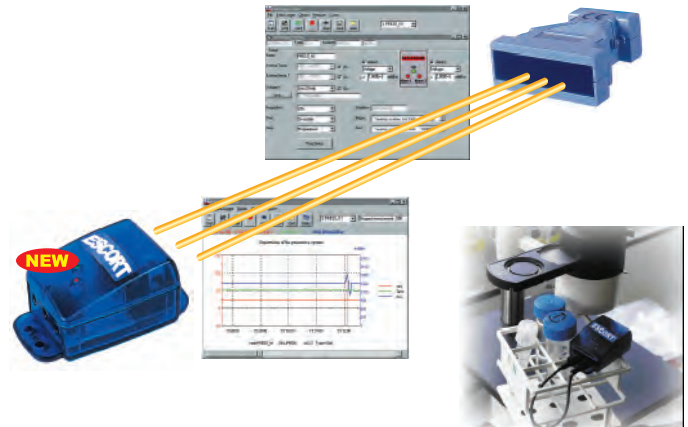
- Like model 1510-K1, this model is dedicated to very high temperature (+1200°C). Furthermore, it is equipped with a DC voltage input to control every physical parameters (pressure, movements, ...).

Escort 1550-K1

- For applications in industrial process (temperature control), ESCORT 1550-K1 is provided with 4 temperature inputs.

Escort 1555

- Records simultaneously 4 electrical parameters. ESCORT 1555 provides 4 voltage inputs (0-25V). The optional accessory 915003121 -external current to voltage adaptor (4-20mA) - will allow you to monitor currents



Escort 1500 Software

- 100 % compatible with the whole DATA LOGGER range.
 - You can set your measurement parameters, read data from DATA LOGGER through the infrared interface, display graphs and export data to other applications.
- Special functions like zooming, scale change will help you to process data recorded.



Ordering Information

Standard Accessories:

all the model : Mounted lithium battery (915005200)

Change accessories:

- ESCORT 1510 - 1530 : 3 male jacks
- ESCORT 1541 : Simple bonding cord 1 m (SA 200)
- ESCORT 1545-K : Bonding cord with "K" thermocouple (SA 207)
- ESCORT 1511PT and 1511PT1 : connector with 3 inputs to cable PT100
- ESCORT 1550-K1 : connector with 8 inputs to cable four thermocouples
- ESCORT 1555 : connector with 8 inputs to cable four tensions inputs
- 915005200 - Lithium battery
- 915005300 - Tightness joint (ESCORT 1501)
- 915005400 - Mounting Kit with 5 Magnets and 5 "Velcro" Strips

Optional Accessories:

- SA 201 : Simple bonding cord 2m (ESCORT LOG 541)
- SC 600 : Transport case
- SI 683 : Application software for Personal Computer on CD Rom
- SI 684 : Kit with : software + infrared transmitter-receiver + RS 232 cord
- SI 685 : Kit with : RS 232 cord + infrared transmitter-receiver
- SI 686 : Serial/ Infrared transmitter receiver
- SI 687 : Remote Control Unit (Start / Stop) (All dataloggers excepted 1501P and 1520P (115200 bps))
- SI 688 : RS 232 cord - DB9-Fr/DB9-M
- SI 692 : USB/ Infrared transmitter receiver
- SI 694 : Application software for Palm OS on CDR
- ST 400 : Thread probe "K" type, general use, -40 to 204°C
- ST405 : Probe PT100 -94°F +482°F wiring 3 wire in Tube stainless diameter 3mm, 100mm length (cable2m).
- 915003120 : 0-25mA Adapter (with special DIN/OMEGA rail holder)
- 915003130 : Adapter for DIN/OMEGA Rail
- 915003150 : K to Jack Adapter
- 915005100 : Plastic bag with 10 male jacks
- 915003151 : Banana (4mm) to Jack Adapter
- 915003152 : Kit with connectors with 3 inputs to cable PT100
- 915003152 : Kit with connectors with 8 inputs to cable four K thermocouples or four tension inputs.

DATA LOGGER SPECIFICATIONS

Robustness and reliability

The small size and the innovative design of the package have been made without compromise :

Accuracy	all models use a 12 bit resolution converter
Robustness	mechanical case according to NF EN 60068- 2-27 1987
Memory	21600 to 43300 measurements capacity
Autonomy	more than 2 years with built-in lithium battery
Watertightness	IP68 for model 1501
Alarms	2 visual programed alarms. Allows to detect immediately thresh hold over stepping
Flexibility	measurement rate can be programed from 0.5s to 1 hour

DATA LOGGER	1501	1510K	1510-K1	1511-PT	1511-PT1	1520	1520-K	1522-K	1525	1530-K	1530-K1	1541	1545-K	1550-K1	1555
int.T with internal senser	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Ext.T,"K" type probe		√	√				√			√	√		√		
Ext.,2 inputs, "K"probe								√						√ (4gpts)	
Humidity				√	√										
Tex PT 100 probe						√	√								
Voltage input 2.5V/10V/25V									√	√	√				√ (4gpts)
Current input 0-25mA*									√	√	√				√ (4gpts)

All specifications are subject to be changed by ESCORT without notice.

Thermometer and T/C Calibrator

ESCORT-22 / 21 / 20

Features

ESCORT-22/21 T/C Calibrator

- Simulate 13 types thermocouple and mV output with 0.03% accuracy
- Measures current Simultaneously. (ESCORT-21 only)
- Measures 13 types thermocouple and mV output simultaneously (ESCORT-22 only)
- Scan/Ramp output
- Transmitter simulation:
- Measures(0~100%)/Output(0~1V)
- DC 24V Loop power (ESCORT-21 only)
- Data logging for measurement function
- External RTD sensor for cold junction compensation
- ITS-90 / IEC-60584 thermocouples
- Dual display with five digit resolution
- Audible alert for high/Low limit function
- EL back light

ESCORT-20 13-Type Thermometer

- Thirteen types J, K, T, E, R, S, B, N, G, C, D, U, L selectable
- mV/V/Temperature measurement
- Power by battery or external adapter
- Audible warning for High/ Low limit function
- Alarm output to control external device for High/Low/ limit function
- 0.1° resolutions
- °C/°F displays
- Dual inputs T1, T2, or T1-T2 measurements
- ITS-90/IEC-60584 thermocouples
- Data Logging
- Max, AVG, MIN recording
- Data Hold
- Relative mode
- Dual display with EL back-lit
- Auto power off
- Optical RS-232C interface



ESCORT-22 ESCORT-21 ESCORT-20

Ordering Information

Standard Accessories:

- 9V Alkaline Battery
- DP-26 k-type Thermo-Couple Adaptor(ESCORT-20/22)
- DP-27 k-type Thermo-Couple Probe(ESCORT-20/22)
- EH-90G Protective Holster
- TL-21 Leads with alligator clips
- Manual

Optional Accessories:

- EA-55A AC 220V, 12V/300mA adapter
- CP-06 Communication Package(ESCORT-20)
- DP-31 k-type Immersion Probe
- DP-32 k-type Air Probe
- DP-33 k-type Surface Probe(ESCORT-20, 22 only)
- DP-36 Dual Input k-type Thermo-Couple Adaptor
- TP-01 Thermocouple probe(ESCORT-20)
- TP-RIK Pt-385/1k (RTD Probe, Stainless)

Thermocouple Output and Measurement (Measurement only for ESCORT-22/20, output only for ESCORT 21/22)

Type	(°C)	Range	(°F)	Resolution (°C or °F)	Accuracy ± (°% + °C)
J	-210~0		-346~32	0.1	0.03%+1.0
	0~1200		32~2192		0.03%+0.6
K	-200~0		-328~32	0.1	0.03%+1.0
	0~1372		32~2502		0.03%+0.6
E	-200~0		-328~32	0.1	0.03%+1.0
	0~1000		32~1832		0.03%+0.6
T	-200~0		-328~32	0.1	0.03%+1.0
	0~400		32~752		0.03%+0.6
R	-50~1768		-58~3214	1	0.03%+1.0
S	-50~1768		-58~3214	1	0.03%+1.0
B	300~1820		572~3308	1	0.03%+2.0
N	-200~0		-328~32	0.1	0.03%+1.5
	0~1300		32~2372		0.03%+1.0
G	0~2320		32~4208	1	0.03%+2.0
C	0~2320		32~4208	1	0.03%+2.0
D	0~2320		32~4208	1	0.03%+2.0
U	-200~0		-328~32	0.1	0.03%+1.0
	0~600		32~1112		0.03%+0.6
L	-200~0		-328~32	0.1	0.03%+1.0
	0~900		32~1650		0.03%+0.6

Environment Temperature Measurement

Cold Junction Type	Range	Resolution	Accuracy
External	0~40°C	0.1°C	±0.03+0.9°C
Pt 385 / 1kΩ	-20~250°C	0.1°C	±0.03+1.2°C

DCV Output (ESCORT-22/21 only)

Range	Resolution	Accuracy	Max. input voltage
-10mV~110mV	0.01mV	0.03%+3	30V
-0.1V~1.1V	0.1mV	0.03%+3	30V

DCV Measurement (ESCORT-22/20 only)

Rang (Auto)	Resolution	Accuracy	Max. input voltage
100.00mV	0.01mV	0.03%+3	30V
1.0000V	0.1mV	0.03%+3	30V

Loop Power (ESCORT-21 only)

Output Value	Loading	Accuracy	Max. input voltage
24V	>1kΩ	±10%	30V

DC mA Measurement (ESCORT-21 only)

Range	Resolution	Accuracy	Max. input voltage
20.000mA	1μA	0.03%+3	<0.1 (typical), 1Ω
200.00mA	10μA	0.03%+3	<0.1 (typical), 1Ω

Alarm Output (ESCORT-20 only)

Ext. Supply Vcc	Current Limit	High/Low Level	Max. input voltage
3~24V	0.01mA~3mA	>2/3Vcc	30V

General Specifications

Display	Both lower and upper displays have 5 digits LCD Automatic polarity indication
Measuring rate	1 time per second
Safety	Design to meet LVD (IEC -1010-1, EMS), ULc
Operating Temp.	0°C~+40°C, 0~80%RH
Power Supply	Single 9V Carbon-zinc or Alkaline battery
Battery Life	>25 Hours
Dimensions (L x W x H)	192×90×37mm (with Holster)
Weight	1,240g with standard accessories

All specifications are subject to be changed by ESCORT without notice.

Thermometer and T/C Calibrator

ESCORT-24 / 26 / 30 / 34 / 36

Features

ESCORT-24 K type T/C Thermometer

- K type thermocouple. Dual input T1, T2, T1-T2
- Maximum reading memory
- Low battery indicator
- Hold function
- °C/°F unit switchable
- Auto power off (20min), disable sleep mode
- Temperature coefficient: 0.1 times the applicable accuracy specification per °C from 0°C to 18°C and 28°C to 50°C.

ESCORT-26 K,J,T,R,S,E. Thermometer

- Use one meter with up to six different thermocouple types. Select best probe type for your application
- Triple display screen
- Collect data for real-time to a PC with RS232C communication
- Timer, backlight display, °C/°F switchable, Record button, Hold / Release button
- ideal for HVAC / R technicians, research, industrial process and quality control
- Optional RS232C software (Disk & PC cable)
- Serial format: Baud rate: 2400 bit / sec, Stop Bit: 1, Data Bit: 8
- Dual input, T1-T2, channel, (xxxx:xxxx)



€ ESCORT-24



€ ESCORT-26

ESCORT 30 Stick Laser Infrared Meter

- Easy to use, simple and accurate.
- Instant, non-contact Temperature measurement.
- A popular meter for the temperature measurement of process conditions and rotating objects.
- Simple one hand operation.
- Pre-set unit either °C or °F .
- Emissivity fixed at 0.95.
- At 5 inches measure an one inch target.
- Wide range of applications include : Heating and Air conditioning, Safety and Fire inspectors, Plastics molding, Asphalt, Marine, Screen printing, Measure ink and Dryer temperature.

Specifications	ESCORT 24	ESCORT 26
thermocouple	K	K/J/T/R/S/E
Temperature range	-50°C~1300°C(-58~2000°F)	K(-200~1370°C), J(-200~760°C), S(0~1760°C), E(-200~1000°C) ±(0.1% rdg + 0.7°C/1.4°C)
Accuracy	T(-200~390°C), R(0~1760°C), -50°C~1000°C ±(0.3% rdg + 1°C) 1000°C~1300°C ±(0.5% rdg + 1°C) -58°F ~1800°F ±(0.3% rdg + 2°F) 1800°F ~2000°F ±(0.5% rdg + 2°F)	S(0~1760°C), E(-200~1000°C) ±(0.1% rdg + 0.7°C/1.4°C)
Resolution	1.0°C/1.0°F	0.1~1°C/0.1~1°F
Operation temperature	0~50°C (0~85%RH.)	0~50°C (0~85%RH.)
Auto power off	yes	yes
Battery	9 Volt	9 Volt
Display	37mm x 42mm LCD, Maximum reading 1999	50mm x 29mm
Dimensions	181mm x 71mm x 38mm (W x H x T)	72 x 182 x 30mm. (W x H x T)
Weight	158g	158g

All specifications are subject to be changed by ESCORT without notice.

Features

ESCORT 34 Pocket Infrared Meter

- Non-contact temperature measurement
- Adjust the emissivity of the meter to get a reliable temperature reading
- Easy to use, simple and accurate
- A great portable device for the food and automotive industry
- A popular meter for the temperature measurement of process conditions and rotating objects
- Simple one hand operation
- At 8 inches measure a one inch target
- Wide range of applications include: Heating and Air conditioning, Safety and Fire inspectors, Plastics molding, Asphalt, Marine, Screen printing, Measure ink and Maintenance
- Backlight feature for use in dark areas
- Shape design as pocket size type



€ ESCORT-30



€ ESCORT-34

ESCORT-36 Mini-gun Laser Infrared Meter

- Pre-set emissivity or 3 points emissivity selectable, for simple set up
- Non-contact measurement with laser pointer.
- A great portable device for Mobile industry .
- A popular meter for temperature measurement of process and maintenance conditions.
- Auto Power off after 4 seconds non-operation.
- Ambient temperature at 0°C calibrated by black body.
- Backlight feature for use in dark areas.
- Wide range of applications include: Food preparation, Safety and Fire inspectors, Plastics molding, Asphalt, Marine and Screen printing, measure ink and Dryer temperature, Diesel and Fleet maintenance.
- Class II laser product, complies with FDA radiation performance standard 21CFR subchapter J.
- < 1mW output at 675nm wave length.



€ ESCORT-36

Ordering Information

ESCORT-24/26 Standard Accessories:

- Manual
- 9V battery
- Hard plastic case
- One K-type thermocouple probe

Optional Accessories:

- Communication package(ESCORT-26)

ESCORT-30/34/36 Standard Accessories:

- Manual
- battery
- Soft case
- wrist strap(ESCORT-36)

Specifications	ESCORT 30	ESCORT 34	ESCORT 36
Range	-20~320°C(-4°F ~600°F)	-20~420°C(-4~788°F)	-40~500°C(-40~932°F)
Accuracy	-20~100°C, 2°C whichever is greater. 101~320°C, ±4%°C or 3°C whichever is greater.	±2% or 2°C	-40~100°C: ±2% or 2°C whichever is greater. 101~520°C: ±3% or 3°C whichever is greater.
Resolution	1°C/1°F	1°C/1°F	0.1°C/0.1°F (-40~110°C/-40~230°F)
Repeatability	±1°C	±1°C or 2°F	±1°C
Emissivity	0.95	0.3~1.0	0.95, 0.90, 0.85, 3 point selectable
Distance Spot ratio	5:1	8:1	10:1
Response time	500ms	500ms	500ms
Storage ambient	-20~100°C, humidity: <90%	-20~50°C, <90%	-40~100°C, humidity: <90%
Operating ambient	0~50°C(0~80%RH.)	10~40°C, 10~90%RH.	0~50°C(Humidity <80%)
Auto power off	yes	yes	yes
Consumption	Max. 40mA.	Approx. 12mA	Max. 40mA
Power	9 Volt battery.	9 Volt battery.	9 Volt battery
Dimension	44(W) x 40 (D) x 170 (H) mm.	156(L) x 33(W) x 52.6(W)mm	160(L) x 50(W) x 32.5(H)mm
Weight Approx.	140g.	180g	220g

Analog Oscilloscopes

- EAS-1001** 100MHz Oscilloscope with delay sweep
- EAS-1000** 100MHz Oscilloscope
- EAS-601** 60MHz Oscilloscope with delay sweep
- EAS-600** 60MHz Oscilloscope
- EAS-401** 40MHz Oscilloscope with delay sweep
- EAS-400** 40MHz Oscilloscope
- EAS-201** 20MHz Oscilloscope with delay sweep
- EAS-200** 20MHz Oscilloscope



☞ **EAS-201/EAS-200**

☞ **EAS-601/EAS-600**

☞ **EAS-401/EAS-400**

☞ **EAS-1001/EAS-1000**

Features

- Dual or single trace operation
- 5mV/div sensitivity
- Signal delay sweep (EAS-1001/601/401/201)
- Z axis input
- X10 sweep magnification
- Component tester (EAS-601/401/201 only)

Ordering Information

Standard Accessories:
 Manual
 TP-321 100MHz, 1x 10x switchable Probes(EAS-1001,1000)
 TP-323 60MHz, 1x 10x switchable Probes
 AC Power Cord

Optional Accessories:

EAS-HVP-15HF High voltage probe (15KV DC)
 EAS-HP-9101R 100MHz probe (600V DC)

Specifications	EAS-1001	EAS-1000	EAS-601	EAS-600	EAS-401	EAS-400	EAS-201	EAS-200	
Vertical System									
Sensitivity	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps	1mV/div-1V/div (±3%) at x 5 gain selected. 5mV/div-5V/div (±3%) 10steps in 1-2-5 sequence, continuously variable between V/div steps
Bandwidth	DC-100MHz (-3dB) DC-25MHz (-3dB) when x 5 gain selected	DC-100MHz (-3dB) DC-25MHz (-3dB) when x 5 gain selected	DC-60MHz (-3dB) DC-20MHz (-3dB) when x 5 gain selected	DC-60MHz (-3dB) DC-20MHz (-3dB) when x 5 gain selected	DC-40MHz (-3dB) DC-15MHz (-3dB) when x 5 gain selected	DC-40MHz (-3dB) DC-15MHz (-3dB) when x 5 gain selected	DC-20MHz (-3dB) DC-10MHz (-3dB) when x 5 gain selected	DC-40MHz (-3dB) DC-15MHz (-3dB) when x 5 gain selected	DC-40MHz (-3dB) DC-15MHz (-3dB) when x 5 gain selected
Rise Time	1mV/div:14ns	approx. 3.5ns	1mV/div:17.5ns	approx. 5.8ns	Less than 8.8ns	Less than 8.8ns	Less than 17.5ns	Less than 17.5ns	Less than 17.5ns
Input Impedance	1MΩ ±2%±10pF	1MΩ ±2%±10pF	1MΩ ±2%±10pF	1MΩ ±2%±10pF	1MΩ ±2%±10pF	1MΩ ±2%±10pF	1MΩ ±2%±10pF	1MΩ ±2%±10pF	1MΩ ±2%±10pF
Max. Input Voltage	400V (DC+AC peak)	400V (DC+AC peak)	400V (DC+AC peak)	400V (DC+AC peak)	400V (DC+AC peak)	400V (DC+AC peak)	400V (DC+AC peak)	400V (DC+AC peak)	400V (DC+AC peak)
Horizontal System									
Sweep Time	2ns/div 50ms/div at x 10Mag, 20ns/div-0.5s/div (±3%) 23 steps in 1-2-5 sequence, continuously variable between s/div steps	2ns/div 50ms/div at x 10Mag, 20ns/div-0.5s/div (±3%) 23 steps in 1-2-5 sequence, continuously variable between s/div steps	0.01μs/div 20ms/div at x 10Mag, 0.1μs/div-0.2s/div (±3%) 20 steps in 1-2-5 sequence, continuously variable between s/div steps	0.01μs/div 20ms/div at x 10Mag, 0.1μs/div-0.2s/div (±3%) 20 steps in 1-2-5 sequence, continuously variable between s/div steps	0.01μs/div 20ms/div at x 10Mag, 0.1μs/div-2.0s/div (±3%) 23 steps in 1-2-5 sequence, continuously variable between s/div steps	0.01μs/div 20ms/div at x 10Mag, 0.1μs/div-2.0s/div (±3%) 23 steps in 1-2-5 sequence, continuously variable between s/div steps	0.01μs/div 20ms/div at x 10Mag, 0.1μs/div-2.0s/div (±3%) 20 steps in 1-2-5 sequence, continuously variable between s/div steps	0.01μs/div 20ms/div at x 10Mag, 0.1μs/div-2.0s/div (±3%) 20 steps in 1-2-5 sequence, continuously variable between s/div steps	0.01μs/div 20ms/div at x 10Mag, 0.1μs/div-2.0s/div (±3%) 20 steps in 1-2-5 sequence, continuously variable between s/div steps
Sweep Mode	Main, Mix, Delay X-Y	X-Y	Main, Mix, Delay X-Y	X-Y	Main, Mix, Delay X-Y	X-Y	Main, Mix, Delay X-Y	X-Y	X-Y
Hold Off Time	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)	5:1, continuously variable (0.1μs/div)
Trigger Source	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT	CH1, CH2, LINE, EXT
Trigger Mode	AC, TV-(DC), TV-H, LINE	AC, TV-(DC), TV-H, LINE	AUTO, NORW, TV-V, TV-H	AUTO, NORW, TV-V, TV-H	AUTO, NORW, TV-V, TV-H	AUTO, NORW, TV-V, TV-H	AUTO, NORW, TV-V, TV-H	AUTO, NORW, TV-V, TV-H	AUTO, NORW, TV-V, TV-H
Trigger Slope	"+" or "-"	"+" or "-"	"+" or "-"	"+" or "-"	"+" or "-"	"+" or "-"	"+" or "-"	"+" or "-"	"+" or "-"
X-Y Operation									
Sensitivity	Same as the vertical system	Same as the vertical system	Same as the vertical system	Same as the vertical system	Same as the vertical system	Same as the vertical system	Same as the vertical system	Same as the vertical system	Same as the vertical system
Accuracy	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%	Y-Axis ±3% X-Axis ±6%
Bandwidth	DC-1MHz (-3dB)	DC-1MHz (-3dB)	DC-1MHz (-3dB)	DC-1MHz (-3dB)	DC-1MHz (-3dB)	DC-1MHz (-3dB)	DC-1MHz (-3dB)	DC-1MHz (-3dB)	DC-1MHz (-3dB)
Phase Difference	Approximately 3° at 50kHz	Approximately 3° at 50kHz	Approximately 3° at 50kHz	Approximately 3° at 100kHz	Approximately 3° at 100kHz	Approximately 3° at 50kHz	Approximately 3° at 50kHz	Approximately 3° at 80kHz	Approximately 3° at 80kHz
CRT									
Type	Rectangular with graticule	Rectangular with graticule	Rectangular with graticule	Rectangular with graticule	Rectangular with graticule	Rectangular with graticule	Rectangular with graticule	Rectangular with graticule	Rectangular with graticule
Display Area	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)	8 x 10div (1div=1cm)
Accelerating Voltage	14kV	14kV	12kV	12kV	2.1kV	2.1kV	2.1kV	2.1kV	2.1kV
Controls	Intensity, Focus, Trace Rotation	Intensity, Focus, Trace Rotation	Intensity, Focus, Trace Rotation Beam Finder	Intensity, Focus, Trace Rotation,	Intensity, Focus, Trace Rotation, Beam Finder	Intensity, Focus, Trace Rotation,	Intensity, Focus, Trace Rotation, Beam Finder	Intensity, Focus, Trace Rotation,	Intensity, Focus, Trace Rotation,
Others									
Calibrator	Square wave 1kHz ±10% 0.5Vp-p (±3%)	Square wave 1kHz ±10% 0.5Vp-p (±3%)	Square wave 1kHz ±10% 0.5Vp-p (±3%)	Square wave 1kHz ±10% 0.5Vp-p (±3%)	Square wave 1kHz ±10% 2Vp-p (±3%)	Square wave 1kHz ±10% 20Vp-p (±3%)	Square wave 1kHz ±10% 2Vp-p (±3%)	Square wave 1kHz ±10% 2.0Vp-p (±3%)	Square wave 1kHz ±10% 2.0Vp-p (±3%)
Power Requirement	115V, 230VAC ±10%, 50/60Hz, Approx. 60W	110V, 125V, 220V, 240VAC ±10%, 50/60Hz, Approx. 60W	110V, 125V, 220V, 240VAC ±10%, 50/60Hz, Approx. 40W	110V, 125V, 220V, 240VAC ±10%, 50/60Hz, Approx. 40W	115V, 230VAC ±10%, 50/60Hz, Approx. 38W	115V, 230VAC ±10%, 50/60Hz, Approx. 40W	110V, 125V, 220V, 240VAC ±10%, 50/60Hz, Approx. 38W	110V, 125V, 220V, 240VAC ±10%, 50/60Hz, Approx. 40W	110V, 125V, 220V, 240VAC ±10%, 50/60Hz, Approx. 40W
Dimensions(WxHxD)	324 x 132 x 398mm	324 x 132 x 398mm	324 x 132 x 398mm	324 x 132 x 398mm	324 x 132 x 398mm	324 x 132 x 398mm	324 x 132 x 398mm	324 x 132 x 398mm	324 x 132 x 398mm
Weight	Approx. 8.5kg	Approx. 8.5kg	Approx. 7.8kg	Approx. 7.8kg	Approx. 7.6kg	Approx. 7.8kg	Approx. 7.6kg	Approx. 7.6kg	Approx. 7.6kg
Z-Modulation			Positive TTL signal, low level blank intensity at any intensity, high level unblank intensity		Positive TTL signal, low level blank intensity at any intensity, high level unblank intensity		Positive TTL signal, low level blank intensity at any intensity, high level unblank intensity		Positive TTL signal, low level blank intensity at any intensity, high level unblank intensity
Y Output			Yes(CH2)		Yes(CH2)		Yes(CH2)		Yes(CH2)
CE Standard	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity	E.M.C Regulations-1992 (E.C.Directive 89/336/EEC) EN50081-1 Emissions EN 50082-1 Immunity

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Function Generators

EGC-3238A/3236A/3235A

15/10/5MHz Sweep Function Generator

Features

EGC-3235A/3236A/3238A

- 0.01Hz to 15MHz in 8 steps (EGC-3238A)
- 0.01Hz to 10MHz in 8 steps (EGC-3236A)
- 0.01Hz to 5MHz in 8 steps (EGC-3235A)
- Frequency, symmetry, sweep, DC offset and amplitude function
- Built-in 50MHz frequency counter
- AM, FM and Ext. modulation (EGC-3238A/3236A only)
- Fast output attenuation keys
- Manual/Ext. TRIG and Gate function (EGC-3238A only)



EGC-3238A



EGC-3236A



EGC-3235A

Ordering Information

Standard Accessories:

Manual, Power Cord

Optional Accessories:

- EB-10 3-FT, 50ΩBNC Coaxial Cable with BNC connectors on each end
- EB-11 BNC to BNC 50Ω 1m Coaxial Cable
- TP-321 Passive 1x/10x Switchable Probe

Specifications	EGC-3238A	EGC-3236A	EGC-3235A
Output			
Frequency	0.01Hz to 15MHz, 8 Ranges	0.01Hz to 10MHz, 8 Ranges	0.01Hz to 5MHz, 8 Ranges
Waveforms	Sine, Triangle, Square, Ramp, Pulse, TTL	Sine, Triangle, Square, Ramp, Pulse, TTL	Sine, Triangle, Square, Ramp, Pulse, TTL
Amplitude	10Vp-p@50Ω	10Vp-p@50Ω	10Vp-p@50Ω
Offset	+/- 10V(OC)	+/- 10V(OC)	+/- 10V(OC)
Display			
Display Mode	6 Digits of Seven-Segment LED	6 Digits of Seven-Segment LED	6 Digits of Seven-Segment LED
Modulation	FM/AM	FM/AM	
Sweep Mode	Linear/Log.	Linear/Log.	Linear.
Sweep Time	10 msec to 5 sec.	10 msec to 5 sec.	10 msec to 5 sec.
Sweep Rate	1:1 to 1:100	1:1 to 1:100	1:1 to 1:100
Frequency Counter			
Mode	Internal/External	Internal/External	Internal/External
Range	5Hz~50MHz	5Hz~50MHz	5Hz~50MHz
Time Base	10MHz	10MHz	10MHz
Others			
Line Input	100/120/220/240 VAC Selectable, 50/60 Hz	100/120/220/240 VAC Selectable, 50/60 Hz	100/120/220/240 VAC Selectable, 50/60 Hz
Dimensions (W x H x D)	261 x 71 x 211mm	261 x 71 x 211mm	261 x 71 x 211mm
Weight	1.8kgs Approx.	1.8kgs Approx.	1.8kgs Approx.

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DC Power Supplies

- EPS-6030TD** 60V 3A Digital Display Triple Output DC Power Supply
- EPS-3030TD** 30V 3A Digital Display Triple Output DC Power Supply
- EPS-3060TD** 30V 6A Digital Display Triple Output DC Power Supply
- EPS-6030SD** 60V 3A Digital Display Single Output DC Power Supply
- EPS-3010SD** 30V 10A Digital Display Single Output DC Power Supply
- EPS-3060SD** 30V 6A Digital Display Single Output DC Power Supply
- EPS-6015SD** 60V 1.5A Digital Display Single Output DC Power Supply
- EPS-3030SD** 30V 3A Digital Display Single Output DC Power Supply
- EPS-1850SD** 18V 5A Digital Display Single Output DC Power Supply

- EPS-6030T** 60V 3A Meter Triple Output DC Power Supply
- EPS-3030T** 30V 3A Meter Triple Output DC Power Supply
- EPS-6030D** 60V 3A Meter Dual Output DC Power Supply
- EPS-3030D** 30V 3A Meter Dual Output DC Power Supply
- EPS-3030S** 30V 3A Meter Single Output DC Power Supply



⊕ EPS-6030TD/3060TD/3030TD



⊕ EPS-6030T/3030T



⊕ EPS-6030SD/3060SD/3010SD



⊕ EPS-6030D/3030D



⊕ EPS-6015SD/3030SD/1850SD



⊕ EPS-3030S

Features

- Constant Voltage or Constant Current operation
- Coarse and fine voltage/current controls(single output models only)
- Very Low ripple and noise
- Short circuit protection
- Overload protection and Reverse Polarity Protection
- Independent, Series and parallel operation(triple output models only)
- Adjustable current limiting

Ordering Information

Standard Accessories:


- Manual
- TL-28 Test leads(Alligator to Banana) (EPS-3030D/3030S)
- TL-29 Test leads(Alligator to Banana)
- AC Power Cord

Specifications	EPS-6030TD/3060TD/3030TD	EPS-6030SD/3060SD/3010SD	EPS-6015SD/3030SD/1850SD	EPS-6030T/3030T	EPS-6030D/3030D	EPS-3030S
Display						
Readout	Digital	Digital	Digital	Meter	Meter	Meter
Accuracy	0.5% + 2 dgt	0.5% + 2 dgt	0.5% + 2dgt	≤2.5% of full scale	≤2.5% of full scale	≤2.5% of full scale
Output						
Range	EPS-6030TD 0-60V x 2 0-3A EPS-3030TD 0-30V x 2 0-3A EPS-3060TD 0-30V x 2 0-6A	EPS-6030SD 0-60V x 1 0-3A EPS-3010SD 0-30V x 1 0-3A EPS-3060SD 0-30V x 1 0-6A	EPS-3030SD 0-30V x 1 0-3A EPS-1850SD 0-18V x 1 0-5A EPS-6015SD 0-60V x 1 1.5A	EPS-6030T 0-60V x 2 0-3A EPS-3030T 0-30V x 2 0-3A	EPS-6030D 0-60V x 2 0-3A EPS-3030D 0-30V x 2 0-3A	EPS-3030S 0-30V x 1 0-3A
Constant Voltage Operation						
Load regulation	≤0.01% + 5 mV ≤0.01% + 3 mV (3030TD)	≤0.01% + 3 mV ≤0.01% + 5 mV (≥100W)	≤0.01% + 3 mV	≤0.02% + 3 mV	≤0.02% + 3 mV	≤0.02% + 3 mV
Line regulation	≤0.01% + 3 mV	≤0.01% + 3 mV	≤0.01% + 3 mV	≤0.02% + 3 mV	≤0.02% + 3 mV	≤0.02% + 3 mV
Noise & Ripple	≤1 mVrms ≤0.5mVrms (3030TD)	≤1 mVrms	≤0.5 mVrms	≤0.5mVrms	≤0.5mVrms	≤0.5mVrms
Constant Current Operation						
Load regulation	≤0.06% + 4mA	≤0.06% + 4mA	≤0.06% + 4mA	≤0.2% + 0.5mA	≤0.2% + 0.5mA	≤0.2% + 0.5mA
Line regulation	≤0.06% + 4mA	≤0.06% + 4mA	≤0.06% + 4mA	≤0.2% + 0.25mA	≤0.2% + 0.25mA	≤0.2% + 0.25mA
Noise & Ripple	≤3 mArms(3030TD) ≤1 mVrms	≤3 mArms	≤1 mArms	≤3 mArms	≤3 mArms	≤3 mArms
Fixed Voltage Output						
Range	5V / 3A			5V / 3A		
Load regulation	≤10 mV			≤10 mV		
Line regulation	≤5 mV			≤5 mV		
Noise & Ripple	≤2 mVrms			≤2 mVrms		
Voltage Accuracy	5V ±0.25V			5V ±0.25V		
Tracking						
Mode	Independent/Serial/Parallel			Independent / Serial / Parallel	Independent / Serial / Parallel	Independent / Serial / Parallel
Tracking error	≤0.2% + 50 mV			≤0.25% + 2 mV	≤0.25% + 2 mV	≤0.25% + 2 mV
Serial Regulation	≤300 mV			≤300 mV	≤300 mV	≤300 mV
Others						
Power Source	AC 100V, 120V, 220V, 240V ±10%, 50/60Hz	AC 100V, 120V, 220V, 240V ±10%, 50/60Hz	AC 100V, 120V, 220V, 240V ±10%, 50/60Hz	AC 115V/230V ±10V, 50/60Hz	AC 115V/230V ±10V, 50/60Hz	AC 115V/230V ±10V, 50/60Hz
Voltage Protection	Reverse Polarity	Reverse Polarity	Reverse Polarity	Reverse Polarity	Reverse Polarity	Reverse Polarity
Dimensions (W x H x D)	156 x 270 x 462mm	156 x 270 x 462mm	88 x 213 x 394mm	142 x 260 x 335mm	142 x 260 x 335mm	145 x 140 x 325mm
Weight	13.5 kgs Approx.	18.5kgs Approx. 14.5kgs Approx.(3030TD)	6.5 kgs Approx.	8.5 kgs Approx.	8.5 kgs Approx.	4.5 kgs Approx.

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Accessories

1. Digital Multimeters (handle , Bench , Clamp-On)

Handheld Digital Multimeters			99	98	179	178	176	172	170	169S	168A	163S
Model	P/N	Description										
	TL-88-1	Test Lead (Tip Type probe) 15A/CAT III 1,000V with UL Approval			○	○	○			○		○
	TL-22	Test lead offering high degree safety						○	○		○	
	TL-36-1	Test leads, lantern Type probe, 15A/CAT.III 1000V	○	○								
	61-25035-1	9V Ni-MH rechargeable battery,170mAh	○	*								
	EH-90G	Grey protective Holster with hanging kit	○	○								
	EH-170G	Grey Protective Holster			○	○	○	*	*			
	EC-170	Long Soft Carrying Case(22x14x5.5)cm	*	*	*	*	*	*	*	*	*	*
	EC-230	Square Soft Carrying Case (25.5x20.5x6.5)cm	*	*						*	*	*
	EH 160G	Grey Protective Holster								*	*	*
	EH 170G	Grey protective Holster						*	*			
	CP 05	PC Link Communication package(RS-232)			*	*	*					
	CP 9899	PC Link Communication package(USB)	*	*								
	DP 26	K Type Thermocouple Adaptor used with DP-27	*	*	*							
	DP 27	K Type Thermocouple-bead Probe with Teflon tape insulation	*	*	*							
	Ez Cal-9899	Auto Calibration software; One RS 232 9F-9F Dtype for Bench DMM PC Link; Two Multi Function Test Cable; One Hi Current Test Cable; One K Type Thermocouple; One USB RS-232 Cable	*	*								
	TW-01	SMD Tweezers	*	*								
	EA-9899	External Adapter for charging purpose	*	*								
	TH-02	Insulation Piercing Clip piercing insulated wires with small hard PIN, recommend use with TL-36	*	*	*	*	*	*	*	*	*	*
	TL-36	Test Leads, Lantern Type probe, 15A/CAT. III 1000V	*	*	*	*	*	*	*	*	*	*

Note: ○ standard accessories, * Optional accessories.

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Accessories












1.2 Bench Digital Multimeters			3146A	3145A	3136A
Model pictures	P/N	Description			
	TL-88-1	Test Lead (Tip Type probe) 15A/CAT III 1,000V with UL Approval	*	*	○
	TL-36	Test Leads, Lantern Type probe, 15A/CAT. III 1000V	○	○	*
	15-25437-1	Rear Protective Holster	○	○	○
	15-25438-1	Front protective holster	○	○	○
	KC-01	4 Wire Test Cable Set With Kevin Clippers	*	*	*
	RK 01	Rack-mount kit (used for single meter)	*	*	*
	TH 02	Insulation Piercing Clip piercing insulated wires with small hard PIN Recommend to use with TL-36	*	*	*
	AC-03	Alligator clips (Red and Black Set)	*	*	*
	CP-08	PC Link Communication Package (RS 232)	*	*	
	CP 10	PC Link Communication Package (RS 232)			*
	Ez CA-3136A	Auto Calibration software; Two RS 232 9F-9F Dtype for Bench DMM PC Link; Two Multi Function Test Cable; One Hi Current Test Cable			*
	Ez CAL-3146(45)A	Auto Calibration software; Two RS 232 9F-9F Dtype for Bench DMM PC Link; Two Multi Function Test Cable; One Hi Current Test Cable; One Shorting Bar for 4 w Resistance Measurement Cable	*	*	
	GP-08-3146A/45A	IEEE-488 interface	*	*	
	GP-08-3136A	IEEE-488 interface			*

1.3 Clamp on Multimeters			689	680
Model pictures	P/N	Description		
	TL-88-1	Test Lead (Tip Type probe) 15A/CAT III 1,000V with UL Approval	○	○
	EC-600	Soft Carry Long Soft Carrying Case(27.5 x 11.5 x 6.5)cm.	○	○
	DP-26	K Type Thermocouple used with DP-27	*	
	DP-27	K Type Thermocouple-Bead Probe with Teflon tape insulation	*	
	DP-36	Dual input K Type Thermocouple Adaptor	*	




Note: ○ standard accessories, * Optional accessories. For large photo, Please visit our website: <http://www.escorttw.com> All specifications are subject to be changed by ESCORT without notice.

Accessories





2. Component test meters

Model			128B	132A	133A	3133A
pictures	P/N	Description				
	TL-23	Alligator Clip to Banana Plug	○	○	○	
	TL-20	Test alligator clips with BNC(pair)				○
	EC 170	Long Soft Carrying Case(22 x 14 x 5.5)cm		*	*	
	EH 80G	Grey Protective Holster		*	*	
	CP-09	PC Link Communication package(RS-232)		*	*	*
	CP-128B	PC Link Communication package(USB)	*			
	CP-133A	PC Link Communication package(USB)		*	*	*
	TW 01	SMD Tweezers		*	*	
	TW 02	SMD Tweezers				*
	EA-55	AC/DC Adaptor, European plug line operation for Input: AC 220V/50Hz Output: DC 12V/50mA		*	*	
	EA-112	AC/DC Adaptor, U.S. plug Input: AC 120V/60Hz Output: DC 12V/50mA		*	*	

3. Function Generator

Model			3238A	3236A	3235A
pictures	P/N	Description			
	EB 10	3-FT, 50 Ω BNC Coaxial Cable with BNC connectors on each end	*	*	*
	EB 11	BNC to BNC 50 Ω 1m Coaxial Cable	*	*	*
	TP -321	100MHz 1x / 10x Switchable Probe	*	*	*

4. Analog Oscilloscopes

Model			1001	1000	601	600	401	400	201	200
pictures	P/N	Description								
	TP-321	100MHz 1x,10x Switchable Probes	○	○						
	TP-323	60MHz 1x,10x Switchable Probes			○	○	○	○	○	○
	EAS-HVP-15HF	High Voltage probe(15 KV DC)	*	*	*	*	*	*	*	*
	EAS-HP-9101R	100MHz probe(600V DC)	*	*	*	*	*	*	*	*

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Accessories

5. Process tools

Model pictures	P/N	Description	2030	898
	TL-88-1	Test Leads with UL/CE Approval (a pair)	○	○
	TL-21	Alligator Clip to Banana Plug		○
	61-25035-1	9V Ni-MH(Nickel-Metal Hydride) rechargeable batteries		○
	61-25203-1	4 sets of battery pack (1.2V AA x2)rechargeable batteries	○	
	63-2708-1B	External Adapter, CE, CSA, PSE approval. Input: AC 100-250V/47~63Hz Output: DC 14V/1A	○	
	EA 9898	External Adapter Sets for charging purpose		○
	30-25283-1/2	Alligator Clip (a pair)	○	
	30A-25641-1/2	Alligator Test Leads	○	
	30A-25004-1	Special Yellow Test Leads	○	
	29B-25077-1	Carrying Case(21.5 x 18.8 x 7.5)cm To be used as a stand for Remote control	○	
	EC-230	Square Soft Carrying Case (25.5x20.5x6.5)cm		○
	TH-02	Insulation Piercing Clip piercing insulated wires with small hard PIN Recommend to use with TL-36	*	*
	TL-36	Test Leads, Lantern Type probe, 15A/CAT. III 1000V	*	*
	CP-2030	PC Link Communication package (USB).	*	
	CP-898	PC Link Communication package(USB)		*
	DP-26	K Type Thermocouple used with DP-27	*	*
	DP-27	K Type Thermocouple-Bead Probe with Teflon tape insulation	*	*
	TP-01	K Type Bead Probe(lantern terminals)	*	*
	EZ Cal-2030	Auto Calibration software; Two Multi Function Test Cable; One K Type Thermocouple; One RS 232 9F-9F Dtype for Bench DMM PC Link; One USB RS-232 Cable	*	
	Ez Cal-898	Auto Calibration software; Two Multi Function Test Cable; One K Type Thermocouple; One RS 232 9F-9F Dtype for Bench DMM PC Link; One USB RS-232 Cable		*



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Accessories

6. Thermometer & T/C calibrators

Model			20	21	22
Standard Accessories					
pictures	P/N	Description			
	61-25034-1	9V Alkaline Battery	○	○	○
	DP-26	K Type Thermocouple used with DP-27	○		○
	DP-27	K Type Thermocouple-Bead Probe with Teflon tape insulation	○		○
	EH-90G	Grey Protective Holster for ESCORT-898/98/99 with hanging kits	○	○	○
	TL-21	Leads with alligator clips	○	○	○
	EA-55A	AC/DC Adaptor, European plug line operation for Input: AC 220V/50Hz Output: DC 2V/300mA	*	*	*
	CP-06	PC Link Communication Package(RS 232)	*		
	DP-31	K Type Immersion Probe for liquids and gels, protected from tip to handle, measurement up to 800°C	*	*	*
	DP-32	K Type Air Probe for air and gases protected bead with measurement up to 750°C	*	*	*
	DP-33	K Type Surface Probe for flat or slightly convex surface measurement up to 800°C	*		*
	DP-36	Dual input K Type Thermocouple Adaptor	*	*	*
	TP-01	Thermocouple Probe	*		
	TP-RIK	Pt-385/1k (RTD Probe, Stainless)	*	*	*

7. DC Power Supplies

Model			6030TD/ 3060TD/ 3030TD	6030SD/ 3060SD/ 3010SD	6015SD/ 3030SD/ 1850SD	6030T/ 3030T	6030D/ 3030D	3030D 3030S
Standard Accessories								
pictures	P/N	Description						
	TL-28	Test leads(Alligator to Banana)						○
	TL-29	Test leads(Alligator to Banana)	○	○	○	○	○	

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Accessories

8. Current Protection Fuse

Model		99	98	179	178	176	172	170	169S	168A	163S
P/N	specification										
62-25651-1U	FUSE 0.44A/1000V F/B 10x38mm UL	○	○								
62-25652-1	FUSE 11A/1000V F/B 10x38mm	○	○								
62-25622-1	FUSE 2A/250V F/B 5*20mm UL CERAMIC								○		
62-25640-1	FUSE 10A/600V F/B 6.3*25mm			○	○	○	○	○	○		
62-25646-1	FUSE 0.5A/660V F/B 6.3*32mm			○	○	○	○	○			
62-25615-1U	FUSE 0.63A/600V F/B 5*20mm										○
62-25635-1U	FUSE 10A/250V F/B 5*20mm UL CERAMIC									○	○
62-25026-4U	FUSE 0.25A/250V F/B 5*20mm									○	

Model		3146A	3145A	3136A
P/N	specification			
62-25036-1U	FUSE 15A/600V F/B 10.3*38.1mm UL KTK-15 (main PCB)	○	○	
62-25037-1U	FUSE 25A/250V F/B 6x31mm UL(main PCB)			○
62-25026-3U	FUSE 2A/250V F/B 6*31mm (UL)(front PCB)	○		
62-25031-1	FUSE 0.25A/250V F/B 6*31mm(front PCB)		○	
62-25038-1U	FUSE 1A/250V F/B 6x31mm UL(front PCB)			○
62-25592-3U	FUSE 0.25A/250V S/B 5*20mmUL (120V)(rear PCB)		○	○
62-25648-1U	FUSE 125mA/250V 5x20mm UL,VDE....etc.(220V) (rear PCB)	○	○	○

Model		132A	133A	3133A
P/N	specification			
62-25612-2U	FUSE 0.1A/250V T/L 5x20mm UL,VDE,S	○	○	
62-25612-1U	FUSE 0.1A/250V S/B 5*20mm UL			○
62-25648-1U	FUSE 125mA/250V 5x20mm UL,VDE....etc.(120V)			○
62-25593-1U	FUSE 63mA/250V S/B 5x20mm UL/VDE(220V)			○

Model		20	21	22
P/N	specification			
62-25593-1U	FUSE 250mA/250V 5*20mm UL,VDE..etc	○	○	○
62-25650-1U	FUSE 250mA/250V S/B 5x20mm UL/VDE		○	
62-25623-1B	FUSE 0.63A/250V F/B 5*20mm CERAMIC		○	

Model		2030	898
P/N	specification		
62-25593-1U	FUSE 63mA/250V S/B 5x20mm UL/VDE	○	
62-25623-1B	FUSE 0.63A/250V F/B 5*20mm CERAMIC	○	
62-25651-1U	FUSE 0.44A/1000V F/B 10x38mm UL		○

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