

Thermometer and T/C Calibrator

ESCORT-22 / 21 / 20



ESCORT-22 ESCORT-21 ESCORT-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

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 Halster
- 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)

Range (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.