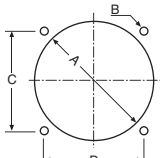


Panel Meters

Panel Meters

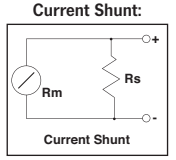


MU45 MU52E ROHS



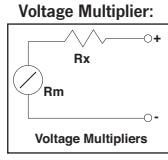
Mounting Detail

Style	A	B	C	D
MU45	45	4	37.5	37.5
MU52E	52	4	48	64



$$R_s = R_m \times \frac{I_m}{I_t - I_m} - R_m$$

Where...
 I_m = FS current of meter
 I_t = FS current required
 R_m = Meter resistance
 R_s = Required shunt



$$R_x = \frac{V}{I} - R_m$$

Where...
 V = FSD voltage required
 I = FSD current of meter
 R_m = Meter resistance
 R_x = Required series resistor

FS Deflection	MU45	MU52E	Resistance
Dimensions (WxHxD)	58x52x24*	80x66x19*	
1mA	Q 0500A	-	210Ω
1A	Q 0508A	-	0.0582Ω
5A	Q 0510A	Q 0533	0.03Ω
10A	Q 0515A	-	0.012Ω
20A	Q 0521A	-	0.004Ω
20V	Q 0523A	-	20kΩ
30V	Q 0525A	Q 0535	30kΩ

*Add 10mm depth to allow for connection terminals.

Price Each	RRP	2+	5+
MU45 models	17.50	15.75	14.00
MU52E models	21.95	20.75	18.45

Backlit VU Meter

Solder tag connections. Includes mounting parts.

SPECIFICATIONS

Backlight:	12V DC 50mA
Signal response:	0.8 seconds
Coil resistance:	650Ω
Mounting hole:	44 x 85mm
Max panel thickness:	10mm
Dimensions:	90.5W x 63.5H x 42Dmm



ROHS

Price Each	RRP	2+	5+
Q 0490	19.50	17.55	15.60

Waterproof IP65 LCD Thermometer Module

SPECIFICATIONS

Resolution	0.1°C
Range:	-30°C to +70°C
Accuracy:	< 40°C ±1.0°C, >40°C ±2.0°C
Sampling Rate:	10s
Indicators:	Over-range, Low battery
Battery:	Li-Ion Cell CR-2032
Dimensions:	68.8L x 34.2W x 24Hmm



ROHS

Price Each	RRP	2+	5+
Q 0576	29.50	27.50	25.80

LCD Thermometer Module

SPECIFICATIONS

Resolution	0.1°C
Range:	-10°C to +70°C
Accuracy:	< 40°C ±1.8°C, >40°C ±3.0°C
Sampling Rate:	10s
Indicators:	Over-range Hi or Lo
Battery:	LR44 (SR44) x 1
Dimensions:	48L x 28.6W x 15.5Hmm



ROHS

Price Each	RRP	2+	5+
Q 0574	19.95	18.55	17.50

Voltage & Current Flush Mount Panel Meter



Simultaneously measures voltage, current, power, charging capacity and time. The two-line LED display can display two different groups of data. The meter can switch between measurements of different parameters. It is ideal for monitoring output voltage and current, as well as the battery charge and discharge applications.

SPECIFICATIONS

Input voltage:	0-90V (±1%)	Display resolution:	0.01 (all units)
Current:	0-20A (±2%)	Units:	Volts, Amps, Watts, Amp Hours, Hours
Display:	4 x 8 segment LED (3 for value and 1 for unit)	Measuring rate:	5 times/s
		Dimensions:	79W x 43H x 25Dmm
		Panel cutout:	76.5W x 39.2Hmm

Price Each	RRP	4+	6+
Q 0590	49.95	44.95	39.95

Digital LED Panel Mount 0-100A Ammeter With Shunt

SPECIFICATIONS

Current range:	0-100A DC
Max input current:	±15mA
Power supply:	5V DC
Maximum count :	999 (3 digit)
Input impedance:	1kΩ
Sample frequency:	400ms
Dimensions:	50W x 26H x 23.5Dmm
Cutout size:	48 x 23mm



ROHS

Includes matched shunt allowing easy connection to measured power source.

Price Each	RRP	2+	5+
Q 0584	54.95	49.50	43.95

Digital LED Panel Mount 8-30V DC Volt Meter

SPECIFICATIONS

Voltage range:	8-30V DC
Maximum count :	999 (3 digit)
Power supply:	8-30V DC
Sample frequency:	400ms
Dimensions:	50W x 26H x 23.5Dmm
Cutout size:	48 x 23mm



ROHS

For applications requiring a professional finish and digital accuracy. Automatic zero calibration, polarity sensing and 8-30V DC powered design makes connection easy.

Price Each	RRP	2+	5+
Q 0585	24.95	22.35	19.70

Digital LED Panel Mount 200mV Volt Meter

SPECIFICATIONS

Voltage range:	±199.9mV DC
Maximum count :	999 (3 digit)
Power supply:	5V DC
Sample frequency:	400ms
Dimensions:	50W x 26H x 23.5Dmm
Cutout size:	48 x 23mm



ROHS

For applications requiring a professional finish and digital accuracy. Automatic zero calibration, polarity sensing and 5V DC powered design makes connection easy.

Price Each	RRP	2+	5+
Q 0588	29.50	26.55	23.60

100A 1mΩ Meter Shunt

SPECIFICATIONS

Dimensions:	81.5L x 20W x 18H
Tolerance:	0.5%
Voltage drop @ max current:	100mV
Resistance:	1mΩ



ROHS

Price Each	RRP	4+	10+
Q 0480	19.95	17.70	15.70