# Test Equipment - Electrical / Environmental

(Drive Capability = 24V compliance or 1200 $\Omega$  @ 20 mA) to 19.999 kHz Frequency 0.005% + 1 LSD

Beeps for resistance <  $100\Omega$ Continuity

Voltage measurement 0 - 1000V ac (true rms) or dc 0.1 mV - 1.0 V 0.1% Rdg + 1 LSD (Vdc) Resistance measurement to 40  $M\Omega$ 

Diode test 2.0 V shows diode voltage drop

**Environmental specifications** 

-20°C to 55°C Operating temperature -40°C to 60°C Storage temperature 95% up to 30°C (without condensation) 75% up to 40°C 45% up to 50°C 35% up to 55°C

 $0.05 \ x$  (specified accuracy) per°C (for temperatures < 18°C or > 28°C Temperature coefficient

Safety specfications Electrical safety

Designed in accordance with IEC 1010-1, ANSI/ISA S82.01-1994 and CAN/CSA C22.2 No. 1010.1-92

Overvoltage category IEC 1010-1 CAT III

Maximum voltage 1000 V rms

General specfications Weight

Shock and vibration Random, 2 g, 5-500 Hz 1 meter drop test

Battery 4 x AA alkaline batteries. Battery life

140 hours typical (measurement), 10 hours typical (sourcing 20 mA) AC72 aligator clips, 4 x AA 9V alkaline battery (installed), Accessories included TL71 safety-designated test lead set, users manual & quick reference guide

Prices where indicated by a #1 are subject to change. Please call your local sales office or visit www.farnellinone.com for the latest prices

					244205
Mftrs.			Price E	ach	
List No.	Order Code	1+	+	+	+
FLUKE 789	427-0034	<b>7</b>	<b>~</b>	<b>7</b>	<b>7</b>
C101 Carry Case	947-9783	<b>7</b>	<b>T</b>	<b>~</b>	<b>7</b>
Standard Calibration	Charge S <mark>C1</mark>	4		<b>~</b>	
<b>UKAS Calibration Cha</b>	rge N <mark>C</mark>	14		<b>7</b>	

### **Multifunction Process Calibrator** 725 and 725Ex









H = 96W=200

The Fluke 725 Multifunction Calibrators are a versatile, easy to use field calibrators. Use the measure and source functions to test and calibrate almost anything. The 725Ex model is an ATEX compliant intrinsically safe version ideal for locations where explosive gasses may be present

- Rugged, reliable design stands up to field use
- Easy to read measure/source screen lets you view input and output simultaneously
- Measure volts, mA, RTDs, thermocouples, frequency, and ohms to test sensors and
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms, and pressure to calibrate transmitters
- Support flow meter testing with frequency and CPM (counts per minute) functions
- Perform fast linearity tests with auto step and auto ramp features
- Power transmitters during test using loop supply with simultaneous mA measurement Store frequently used test setups for later use
- Backlight lets you work in poor light
- Remote interface allows benchtop automated operations

# Summary specifications (18°C to 28°C for one year)

	Function				
	Measure or source	Range	Resolution	Accuracy	Notes
	Voltage	0 to 100mV	0.01mV	0.02% Rdg + 2 LSD	Max Load 1 mA
	· ·	0 to 10V (source)	0.01V	•	
		0 to 30V (measure)	0.01V		
	mA	0 to 24	0.001mA	0.02% Rdg + 2 LSD	Max load 10000
	mV	-10.00mV	0.01mV	0.025% + of range + 1 LSD	
		to + 75.00mV			
	Resistance	15 $\Omega$ to 3200 $\Omega$	$0.01\Omega$	$0.01\Omega$ to $0.1\Omega$	
			to $0.1\Omega$		
	Frequency	1CPM to 10kHz	5 digits	0.05% + 1 count	Squareware
	Loop supply	24Vdc	N/A	10%	
	Thermocouples	J,K,T,E,L,N,U	0.1°C	0.7°C	
	Thermocouples	B,R,S	1°C to 1.4°C		
	RTDs	RTDs Ni120 (672) Pt 100, 200, 500, 1000 (385)			
Pt 100 (3916)					
	Marchan	Pt 100 (3926)			
	Maximum voltage	30V			
	Storage temp.	-40°C to 71°C			
	Operating temp.	10°C to 55°C 95%(10°C to 35°C); 75%(30°C to 40°C); 45%(40°C to 50°C);			
	Relative humidity		75%(30°6 10	40 °C); 45%(40 °C to 50 °C);	
	Chook	35%(50°C to 55°C)			
	Shock	30g, 11ms, half-sine shock (or 1 metre drop test)			

CSA C22.2 No. 1010.1:1994 Class B Safety (Model 725) ATEX Ex (II 1G EEx ia IIB) 171°C KEMA 04ATEX 1303X, Safety (Model 725Ex) I.S. Class I, Div I Groups B-D, 171°C compliant

Weight 4 AA alkaline batteries. Battery life; 25 hours typical

Prices where indicated by a ! are subject to change. Please call your local sales office or visit www.far-

				2225//
Mftrs. List No.	Order Code	1+	Price Each +	+
FLUKE 725	318-3300	<b>7</b>	<b>7</b>	<b>7</b>
FLUKE 725EX	947-9880	<b>7</b>	<b>7</b>	<b>T</b>
C101 Carry Case	947-9783	<b>7</b>	<b>7</b>	<b>T</b>
Standard Calibration Charge	S <mark>C 18</mark>		<b>~</b>	

## **Low Resistance Meter**

### Milli-Ohmeter M210



H=150, W=80, D=38 (Meter) H=155, W=145, D=45 (Case)

# RHOPOINT COMPONENTS

Resistance is measured using a 'Kelvin' configuration of four



wires terminating into two crocodile clips, thereby eliminating errors caused by test lead resistance and simplifies circuit connection.

Suitable for testing the resistance of relay and switch contacts, transformer and motor windings, pcb track and through hole plating, earth bonding, mains ring circuits, and for selecting and matching resistors and strain gauges.

- Battery operated
- Accurate low resistance measurement between  $0.001\Omega$  to  $200\Omega$ .
- Autoranging
- Auto power off, 3 minutes after last measurement
- Supplied with 'Ever Ready' carrying case, test leads and operating instruc-
- Lightweight, portable

1.999R,19.99R,199.9R Temperature drift Ranges +/-0.1% of range Accuracy Display Resolution 0.001R,0.01R,0.1R Operating temperature Zero offset Battery Test current 5mA (max) Test power 5mW (max)

Weight 510g (inc. case)

0.013%/°C 3½ digit LCD, 12mm character height 5 to 35°C One 9V PP3 (20hrs life, continuous use) not supplied

The meter requires a 9V PP3 battery not supplied.

222340

Electrical / Environmental

Equipment -

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available

**Price Each** Mftrs. List No. **Order Code** 1+ + M210 109-279 19,230.00 **Price Each Standard Calibration Charge** S C9 **UKAS Calibration Charge** N C9 **T** 

### Micro and Milli Ohmeter BS407



The BS407 is a fully portable instrument capable of measuring very low resistances to high accuracy. The unusually wide measuring range combined with features such as a 20mV clamp make it suitable for a wide range of applications. Supplied with Kelvin test lead set, operating manual and mains lead.

- H=98, W=219, D=240, Weight 1.5kg
- Wide measurement range of 1μΩ to
- Four terminal measurement using Kelvin lead set
- High basic accuracy of 0.1%
- Current reversal switch for thermal emf detection

Range	Resolution
$1999\mu\Omega$	1μΩ
$19.99$ m $\Omega$	10μΩ
199.9m $Ω$	100μΩ
1999m $Ω$	100mΩ
$19.99\Omega$	$10 \text{m}\Omega$
$199.9\Omega$	$100 \text{m}\Omega$
$1\Omega$	$100 \text{m}\Omega$
$19.99$ k $\Omega$	100Ω

Accuracy: 0.1% range  $\pm$  0.05% reading

Power:

mains charger 230V or 115V internal setting. Safety and EMC: Complies with EN61010-1 and EN61326

- Current diversion switch for easy zero settina
- Battery operation (Ni-MH) with built-in charger
- Minimal warm-up time
- Switchable 20mV clamp for 'dry circuit testing

Test Current 250mA 50mA 10mA 5mA 500uA 50μΑ 50uA 10µA

Temp Coeff. ±30ppm

Internal Ni-MH batteries giving from 8 to 150 hours operation. Built-in

Compliant Non-compliant Limited stock - RoHS replac RoHS

300,000 products, stocked and ready to despatch

Random, 2g, 5-500 Hz

Vibration