

AMR

THERM 2420-1L Portable Temperature Instrument

For Thermocouple Types K, N, L, J, U, T, S

DESCRIPTION

Model MA2420 is a handy temperature measurement instrument with built in display. It features 7 selectable measuring ranges for thermocouple types K, N, L, J, U, T & S.

The unit is easy to operate by means of 7 keys. It incorporates a generously dimensioned 2-row 7/16 segment display including units.

The unit of measure is °F or °C. Measuring functions include measured value with cold junction compensation, thermal voltage mV, zero setting, saving of maximum and minimum values, and hold function.

Test functions include segment monitoring, range monitoring, sensor breakage indication, battery voltage check and display.

SPECIFICATIONS

Measuring input: For thermocouple via miniature flat connector
A/D converter: delta-sigma, 15-bit resolution Measuring ranges:

NiCr-Ni(K)	-200...+1370°C
NiCroSil-Nisil(N)	-200...+1300°C
Fe-CuNi(L)	-200...+900°C
Fe-CuNi(J)	-200...+950°C
CCu-CuNi(U)	-200...+600°C
CCu-CuNi(T)	-200...+400°C
PtRh10-Pt(S)	0 ...1760 °C

Resolution: 0.1 °C

Linearization Accuracy: for thermocouples, types K, N, L, J, U, T :±0.05 °C ±0.05% of measured value; type S :±0.3 °C

Measuring Rate: 2.5 mops (measuring operations per second)

System Accuracy: ±0.1% of measured value ±3 digits

Nominal Temperature: 22°C ±2 °C

Temperature Drift: 0.01% / °C

Cold junction compensation: effective in range -30 to +80 °C
(accuracy ± 0.2 °C ± 0.01 °C / °C)

LC display:

7 segments: Measured value	5 char., 15 mm
Function	4½ characters, 9 mm
16 segments: Units	2 characters, 9 mm
	7 symbols

Keypad: 7 silicone keys

Power Supply: 3 AA alkaline batteries

Current Consumption: approx. 10mA

Housing: LxWxH 127 x 83 x 42 mm ABS (maximum 70 °C)

Operating Temperature: -10 ... +60 °C

Atmospheric Humidity: (ambient)10 ... 90 % r.H. (non-condensing)

ORDERING INFORMATION

Model

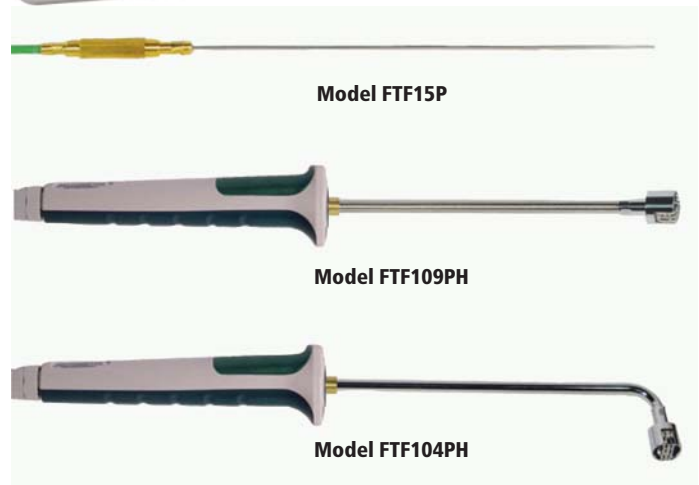
MT24201L Temperature measuring instrument including 3 AA Batteries, Instructions & test certificate

Accessories

FTF15P Temperature sensor for liquids and gases

FTF109PH Temperature sensor for surfaces

FTF104PH Temperature sensor for surfaces, angled head



	Probe Model		
	FTF15P	FTF109PH	FTF104PH
Meas. Element	NiCr-NI (Type K)	NiCr-NI (Type K)	NiCr-NI (Type K)
Probe Length	200 mm	180 mm	180 mm
Meas. Head	1.5 mm	15 mm Dia.	15 mm Dia.
Meas. Range	-200 to 1100 oC	-50 to 500 oC	-50 to 500 oC
Response Time	1.5 s	1 s	1 s
Cable Length	1.4 m PVC	1.5 m PVC	1.5 m PVC
Connector	Mini Flat	Mini Flat	Mini Flat
Notes	Sheathed line, Inconel	Tip is thermal ribbon, not elect. isolated	