

ORDERING INFORMATION

MODEL : M3LU

PLEASE FILL IN THIS SECTION

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Model _____

Company _____

Name _____

P/O No. _____

FACTORY USE ONLY

↓ ↓ ↓ ↓ ↓

Job No. _____

Ser No. _____ - _____

Sales _____

Approved by (Sales office) _____

Issued by (Sales office) _____

Configurable with internal DIP switches and PC configuration software.
 Please use this sheet to specify how you need to configure the transmitter for shipping.
 Fill in blank sections or mark with if necessary.

■ INPUT SETTING

ITEM	SET VALUE	STANDARD	COMMENTS
Input type		DC current	Choose from Table 1. For the potentiometer input specify also the total resistance. (e.g. For the total resistance 2 kΩ potentiometer, specify "Potentiometer (total resistance: 2 kΩ)")
Number of wire	<input type="checkbox"/> 2-wire <input type="checkbox"/> 3-wire <input type="checkbox"/> 4-wire	N/A	Applied for an RTD or resistance input. Choose among 2-wire, 3-wire or 4-wire.
Input range	Input 0%	4mA	Choose from Table 1. For the potentiometer input specify the input range in percentage of the total resistance. (e.g. For the input range 100 - 900Ω with the total resistance 1000Ω, specify 10 as input 0% and 90 as input 100%.)
	Input 100%	20mA	
Input unit	<input type="checkbox"/> °C <input type="checkbox"/> °F <input type="checkbox"/> K <input type="checkbox"/> °R	N/A	Choose a temperature unit for the temperature input types.
PV Damping *1	sec.	0sec.	Specifies the time constant for the primary input filter. Selectable range is from 0.5sec. up to 30 sec. When you do not need a filtering, specify '0.'
Burnout	<input type="checkbox"/> Upscale <input type="checkbox"/> Downscale <input type="checkbox"/> No burnout	Upscale	The burnout includes not only wire breakdowns but also an overrange input exceeding the maximum electrical range applicable to the input circuit.
Cold junction compensation	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Applied for a thermocouple input.
Term Unit *1	<input type="checkbox"/> °C <input type="checkbox"/> °F <input type="checkbox"/> K <input type="checkbox"/> °R	N/A	Applied for a thermocouple input.
Sinc Filter	<input type="checkbox"/> 10Hz <input type="checkbox"/> 20Hz <input type="checkbox"/> 40Hz <input type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz	10Hz	ADC' output rate can be selected among 10, 20, 40, 50 and 60 Hz. Choose 10 Hz for better accuracy; choose 50 or 60 Hz for better response time.

*1 It is not available to specify for M3LU-x/B.

■ OUTPUT SETTING

ITEM	SET VALUE	STANDARD	COMMENTS
Output range	Output 0%	4mA	Choose from Table 2.
	Output 100%	20mA	

■ OTHER SETTINGS

Configuration mode	<input type="checkbox"/> DIP SW <input type="checkbox"/> PC	/A: PC /B: DIP SW	PC setting is usable only with M3LU-x/A.
Front control button lock	<input type="checkbox"/> Unlock <input type="checkbox"/> Lock	Unlock	PC Configuration is not disabled when the front control button function is locked.

Note: The ex-factory setting as shown above can be changed when the power supply is turned on after the DIP switches have been re-configured.

[Table 1]

INPUT TYPE	MIN. SPAN	MAXIMUM RANGE	ACCURACY *1
DC Current	1mA	0 to 20mA	±0.1%
DC Millivolt	4mV	-1000 to +1000mV	±10µV at F.S. input ≤50mV ±40µV at F.S. input ≤200mV ±60µV at F.S. input ≤500mV ±80µV at F.S. input >500mV
DC Voltage	1V	-10 to +10V	±0.1%
Potentiometer	2%	Total resistance 80 to 4000Ω	±0.1Ω
Resistance	10Ω	0 to 4000Ω	±0.1Ω

Thermocouple	°C				K			
	MIN. SPAN	MAXIMUM RANGE	CONFORMANCE RANGE	ACCURACY *1	MIN. SPAN	MAXIMUM RANGE	CONFORMANCE RANGE	ACCURACY *1
(PR)	20	0 to 1760	0 to 1760	±1.00	20	274 to 2033	274 to 2033	±1.00
K (CA)	20	-270 to +1370	-150 to +1370	±0.25	20	4 to 1643	124 to 1643	±0.25
E (CRC)	20	-270 to +1000	-170 to +1000	±0.20	20	4 to 1273	104 to 1273	±0.20
J (IC)	20	-210 to +1200	-180 to +1200	±0.25	20	64 to 1473	94 to 1473	±0.25
T (CC)	20	-270 to +400	-170 to +400	±0.25	20	4 to 673	104 to 673	±0.25
B (RH)	20	100 to 1820	400 to 1760	±0.75	20	374 to 2093	674 to 2033	±0.75
R	20	-50 to +1760	200 to 1760	±0.50	20	224 to 2033	474 to 2033	±0.50
S	20	-50 to +1760	0 to 1760	±0.50	20	224 to 2033	274 to 2033	±0.50
C (WRe 5-26)	20	0 to 2315	0 to 2315	±0.25	20	274 to 2588	274 to 2588	±0.25
N	20	-270 to +1300	-130 to +1300	±0.30	20	4 to 1573	144 to 1573	±0.30
U	20	-200 to +600	-200 to +600	±0.20	20	74 to 873	74 to 873	±0.20
L	20	-200 to +900	-200 to +900	±0.25	20	74 to 1173	74 to 1173	±0.25
P (Platinel II)	20	0 to 1395	0 to 1395	±0.25	20	274 to 1668	274 to 1668	±0.25

Thermocouple	°F				°R			
	MIN. SPAN	MAXIMUM RANGE	CONFORMANCE RANGE	ACCURACY *1	MIN. SPAN	MAXIMUM RANGE	CONFORMANCE RANGE	ACCURACY *1
(PR)	36	32 to 3200	32 to 3200	±1.80	36	492 to 3659	492 to 3659	±1.80
K (CA)	36	-454 to +2498	-238 to +2498	±0.45	36	6 to 2957	222 to 2957	±0.45
E (CRC)	36	-454 to +1832	-274 to +1832	±0.36	36	6 to 2291	186 to 2291	±0.36
J (IC)	36	-346 to +2192	-292 to +2192	±0.45	36	114 to 2651	168 to 2651	±0.45
T (CC)	36	-454 to +752	-274 to +752	±0.45	36	6 to 1211	186 to 1211	±0.45
B (RH)	36	212 to 3308	752 to 3200	±1.35	36	672 to 3767	1212 to 3659	±1.35
R	36	-58 to +3200	392 to 3200	±0.90	36	402 to 3659	852 to 3659	±0.90
S	36	-58 to +3200	32 to 3200	±0.90	36	402 to 3659	492 to 3659	±0.90
C (WRe 5-26)	36	32 to 4199	32 to 4199	±0.45	36	492 to 4658	492 to 4658	±0.45
N	36	-454 to +2372	-202 to +2372	±0.54	36	6 to 2831	258 to 2831	±0.54
U	36	-328 to +1112	-328 to +1112	±0.36	36	132 to 1571	132 to 1571	±0.36
L	36	-328 to +1652	-328 to +1652	±0.45	36	132 to 2111	132 to 2111	±0.45
P (Platinel II)	36	32 to 2543	32 to 2543	±0.45	36	492 to 3002	492 to 3002	±0.45

RTD	°C			K	°F			°R
	MIN. SPAN	MAXIMUM RANGE	ACCURACY *1	MAXIMUM RANGE	MIN. SPAN	MAXIMUM RANGE	ACCURACY *1	MAXIMUM RANGE
Pt 100 (JIS '97, IEC)	20	-200 to +850	±0.15	74 to 1123	36	-328 to +1562	±0.27	132 to 2021
Pt 200	20	-200 to +850	±0.15	74 to 1123	36	-328 to +1562	±0.27	132 to 2021
Pt 300	20	-200 to +850	±0.15	74 to 1123	36	-328 to +1562	±0.27	132 to 2021
Pt 400	20	-200 to +850	±0.15	74 to 1123	36	-328 to +1562	±0.27	132 to 2021
Pt 500	20	-200 to +850	±0.15	74 to 1123	36	-328 to +1562	±0.27	132 to 2021
Pt 1000	20	-200 to +850	±0.15	74 to 1123	36	-328 to +1562	±0.27	132 to 2021
Pt 50Ω (JIS '81)	20	-200 to +649	±0.15	74 to 922	36	-328 to +1200	±0.27	132 to 1659
JPt 100 (JIS '89)	20	-200 to +510	±0.15	74 to 783	36	-328 to +950	±0.27	132 to 1409
Ni 100	20	-80 to +260	±0.15	194 to 533	36	-112 to +500	±0.27	348 to 959
Ni 120	20	-80 to +260	±0.15	194 to 533	36	-112 to +500	±0.27	348 to 959
Ni 508.4Ω	20	-50 to +200	±0.15	224 to 473	36	-58 to +392	±0.27	402 to 851
Ni-Fe 604	20	-200 to +200	±0.15	74 to 473	36	-328 to +392	±0.27	132 to 851
Cu 10 @25°C	20	-50 to +250	±0.50	224 to 523	36	-58 to +482	±0.90	402 to 941

*1. DC, RTD, resistance, potentiometer input: Or ±0.1% of span, whichever is greater.

Thermocouple input: [Accuracy + Cold Junction Compensation Error 0.5°C (0.9°F)] or ±0.1% of span, whichever is greater.

For current output, overall accuracy degrades another 0.1% with spans ≤2mA

[Table 2]

OUTPUT TYPE	MIN. SPAN	MAXIMUM RANGE	CONFORMANCE RANGE
DC current	1mA	0 - 20mA DC	0 - 24mA DC
DC voltage	250mV	-2.5 - +2.5V DC	-3 - +3V DC
	1V	-10 - +10V DC	-11.5 - +11.5V DC