General Specifications

DRU
Super Low Temperature
Transmitter
(μP Built-in Type)

JUXTA

This Super Low Temperature Transmitter is used in combination with 4-wire type (plutinum·cobalt thin alloy) super low RTD (YOKOGAWA J263*B) and make precise measurement from super low temperature upto normal temperature and coverts the temperature into voltage signal.

DRU-□66*A/B□

Model

Input Signal
1 : 4-wire type super low RTD
0 : (Custom Order) other 4-wire type

Output-1 Signal
6 : 1～5V DC

Output-2 Signal
6 : 1～5V DC

Burnout
U : UP
D : DOWN
N : OFF

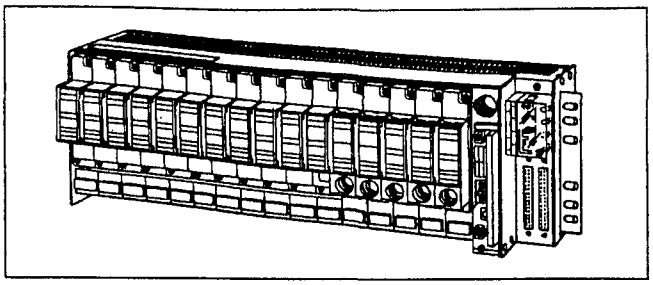
Power Supply
24V DC±10%

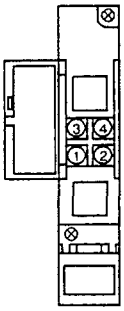
ORDERING INFORMATION
- **Model Code :** (Example) DRU-166*A/BU
- **Range :** (Example) 10～110K

Input & Output
Input Signal : YOKOGAWA J263*B RTD (plutinum·cobalt thin alloy)
Measuring Range : As per YOKOGAWA J263*B RTD Table
Input Resistance : 1MΩ (3kΩ when power off)
Zero Elevation : Within 5 times of span
Span : Standard span is more than 10℃
Input Conductor Resistance : Less than 50Ω per line (whereas resistance values of each line should be equal)
Output-1 Signal : 1～5V DC
Output-2 Signal : 1～5V DC
Permissible Load Resistance : More than 2kΩ for both Output-1 and Output-2
Zero Adjust Range : ±1% of span (input adjustment) ±10% of span (output compensation)
Span Adjust Range : ±1% of span (input adjustment) ±10% of span (output compensation)
Standard Performance
Accuracy Rating : Output-1 : ±0.1% of span or ±0.3℃ whichever greater (including linearized error) Output-2 : Relative error for Output-1 is less than ±0.2%
Response Speed : 200ms 63% response (10～90%)
Burnout : Specify UP, DOWN or OFF Burnout time is less than 60 seconds
Insulation Resistance : More than 100MΩ (500V DC) between input～output～power supply (output-1 and output-2 are not insulated)
Withstand Voltage : 1500V AC/minute between input～output·power supply 500V AC/minute between output～power supply
Temperature Range : 0～50℃
Humidity Range : 5～90% RH (no condensation)
Power Voltage : 24V DC±10% (ripple content is less,than 5%p-p)
Effect of Wiring Resistance : Wiring resistance unbalanced error per 10Ω is 0.01℃
Effect of Power Voltage Fluctuation : Less than ±0.1% of span for fluctuation of 24V DC±10%
Effect of Ambient Temperature Change : Less than ±0.2% of span for change of 10℃
Current Dissipation : 24V DC 70mA
Mounting, Shape & Accessories
Materials : Case ABS plastic
Mounting Method : Store in exclusive nest (Signal·power supply are connected through back board and connector)
Wiring : (External Wiring) Connect to exclusive nest input/output and transmitter front M4 screw terminals· (Connection to DCS I/O card) Connect to exclusive cable connector through nest
External Dimension : 130.6x23.6x126mm (HxWxD)
Weight : About 150g
Accessories : Tag Number Label ..... 1 Range Label 1

TERMINAL ARRANGEMENT

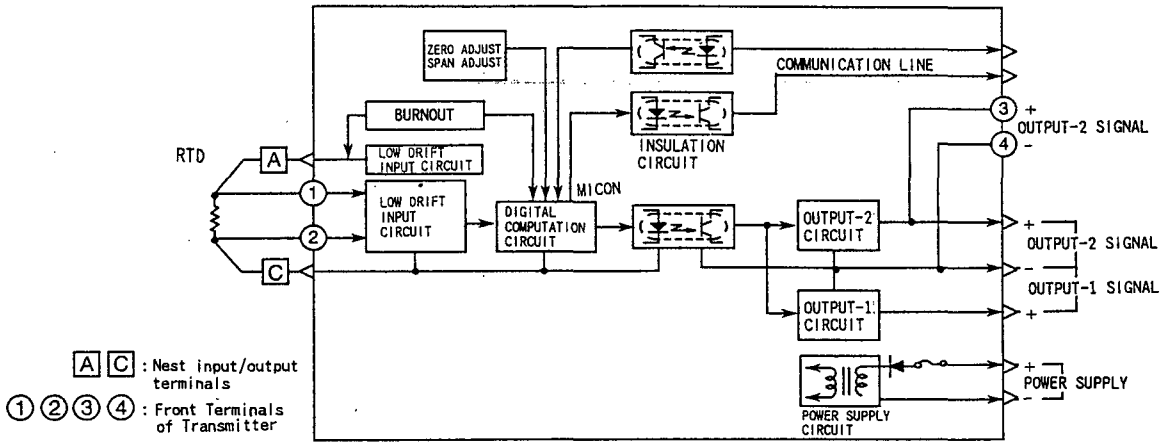
NEST INPUT TERMINAL			TRANSMITTER FRONT TERMINAL			
A	B	C	1	2	3	4
+		-	+	-	+	-
RTD					OUTPUT-2 SIGNAL	





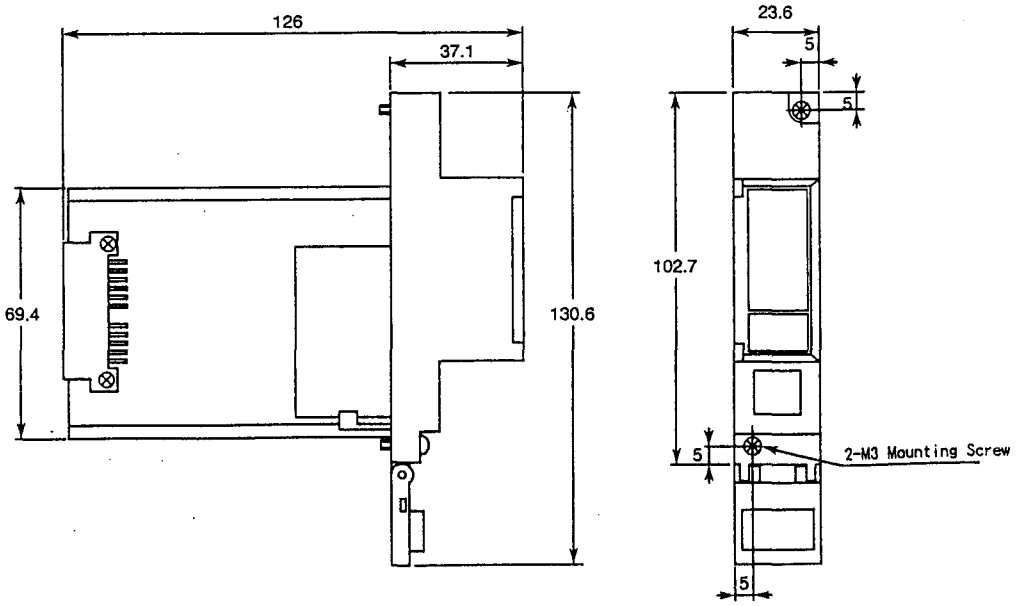
TML	SIGNAL
1	INPUT (+)
2	INPUT (-)
3	OUTPUT-2 (+)
4	OUTPUT-2 (-)

BLOCK DIAGRAM



EXTERNAL DIMENSION

Unit : mm



Subject to change without notice for grade up quality and performance