

**Features****XGF-TC4UD**

- Optimum temperature control
- Universal input: TC, RTD, Voltage, Current
- Isolated input
- Output: Current/Transistor
- Parameter setting via dedicated software: TG-CON
- Variety of control types
  - PID control
  - Cascade control
  - On/ Off control
- Disconnection detection
- Various input functions: Bias, Filter, Square root
- Auto-tuning

**XGF-TC4RT**

- Input RTD : Pt100, JPt100, Pt1000
- Control Type : PID, On / Off Control

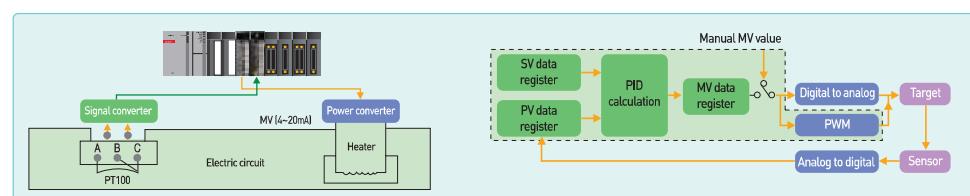
**Specifications**

Item	XGF-TC4UD			XGF-TC4RT
No. of loop	4 loops			4 loops
Input	Thermo couple	K	-200 ~ 1300 °C	
		J	-200 ~ 1200 °C	
		E	-200 ~ 1000 °C	
		T	-200 ~ 400 °C	
		B	400 ~ 1800 °C	
		R	0 ~ 1700 °C	
		S	0 ~ 1700 °C	
		N	-200 ~ 1300 °C	
		C[W5Re/W26Re]	0 ~ 2300 °C	
		PL II	0 ~ 1300 °C	
	RTD	L	-200 ~ 900 °C	
		U	-200 ~ 600 °C	
		Pt100	-200 ~ 850 °C	-200 ~ 850 °C
	Voltage	JPt100	-200 ~ 600 °C	-200 ~ 600 °C
		Pt1000	-200 ~ 800 °C	-200 ~ 800 °C
		DC mV	0 ~ 10mV	-
			0 ~ 100mV	
		DC V	0 ~ 1V	-
			1 ~ 5V	
			0 ~ 5V	
			0 ~ 10V	
			-5V ~ 5V	
			10V ~ 10V	
Current	DC mA		4 ~ 20mA	
			0 ~ 20mA	
	Input channel	4 channels[Input type selection per channel]		

## Specifications

Item	XGF-TC4UD			XGF-TC4RT		
Resolution	Resolution Refer to the user's manual (Resolution for each input type)					
Cold junction compensation	Compensation	Automatic compensation by RJC sensor		–		
	Precision	$\pm 0.2^\circ\text{C}$		–		
Digital output	Temperature display	$0.1^\circ\text{C}/1^\circ\text{C}$ [Selection by software]		$0.1^\circ\text{C}$		
	Linear display	0~1000		–		
	Scale display	Only for voltage/current input Range : -3,000~3,000 Setting range: 0~3000		–		
Conversion speed	200ms / module			400ms / 4loops		
Control type	PID, On/Off control					
Parameter	Set value (SV)	Selection per input type				
	Gain	0 : ON/OFF control, Real type		Range : 0.000~10000.000		
	Integrated time	0 : No Differential control, Real type		Range : 0.000~10000.000		
	Differential time	0 : No Integrated control, Real type		Range : 0.000~10000.000		
Output	No. of output channel	8 channels (PWM or analog output)		4 channels		
	PWM	Rated load voltage	DC 24V			
		Max. current point	0.1A points			
		On voltage drop	DC 0.3V or less			
		Off leakage current	0.1mA or less			
		Response time	ON⇒OFF	1ms or less		
			OFF⇒ON	1ms or less		
	Analog output	Periodic	0.5~120.0sec [resolution: 0.5sec]	0.5~100.0sec [resolution: 0.1s]		
		Time resolution	High value between 10ms or 0.5% of full scale			
		Range	4~20mA			
Insulation	Resistance	600Ω or less				
		$\pm 1.0\%$ , $25^\circ\text{C}$		–		
		8μA				
	Precision					
Warm-up	Item	Insulation	Insulation withstand voltage	Insulation resistance		
	Channel - Channel	Trans	500V AC, 50/60Hz 1min,			
	Input terminal - PLC	Photocoupler	Leakage 10mA or less	500V DC, 10MΩ or more		
	Current output - Current output	Non insulation				
Terminal	External power- Output					
Power	18 points terminal					
Current consumption	5V, DC 24V [external] DC 5V : 900mA [Internal] DC 24V : 300mA (external)			DC 5V: 310mA DC 24V: 28mA		

## Example : Constant temperature



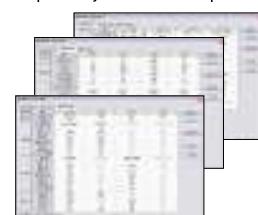
SPECIAL

## XG-TCON

- The configuration tool for the temperature control module
- Easy parameter settings, data monitoring and trend-monitor support
- Auto-tuning operation command to speed up the system is set up and test operation



Data Monitor



Parameter setting (input parameter)



Trend monitor