masibus®
A Sonepar Company

8208-IP

Weather Proof Scanner

4 / 8 - Channel

The 8208-IP Scanner offers 4 / 8 channel monitoring with advanced functions and full programming features with touch sense keys in IP65 Weather proof protection for monitoring process values and protection application.

8208-IP has option for 4/ 8 channels accepting universal input and 4 relays to serve various applications. The unit has separate Numeric displays for CH. No., Group and Process Value. All Configuration and Calibration can be done from front keypad.

8208-IP has 4 relays with full mapping and logic flexibility. User has facility to program alarm, trip set-points and logic individually or group wise. Channels can be configured up to 4 groups with one relay per group; 2 groups with 2 relays per group or 1 group with 4 relays per group. Two discrete LEDs are provided per channel and one LED per relay for indication.

8208-IP has built-in Isolated RS485 serial communication port with Modbus RTU protocol and provides optional analog retransmission output with Max/ Min to further interface with PLC/DAS/DCS/ SCADA.

8208-IP is a wall mounting unit with 6 nos of PG11 glands for multi-core cable wiring. However 8 channels Scanner has an optional possibility of upto 12 nos PG11 glands.

Features

- Universal input for each Analog Input
- IP65 for Weather proof protection
- Easy Programming by front Touch sense keypad
- Fast Sampling rate with instantaneous relay action
- Four relays for alarm/trip
- RS485 Serial communication port for remote monitoring
- Comprehensive Alarm/Trip logic programming
- Multiple Levels of configuration and password protection
- Retransmission output (Optional)

Applications

- Generator Monitoring and Protection
- Pharma application
- Chemical industries
- Monitoring of Air compressor, pump, transformers, fans and blowers DG temperature monitoring
- Motor protection: Winding & Bearing temperature
- Water and Waste-Water remote monitoring
- Electrical Sub-station monitoring
- Drying Ovens
- Fermentation Processes
- Flow Monitoring
- Retorts and Cooking Processes
- Heat Treatment: to achieve desired result of hardening or softening material
- Power Monitoring
- As a SCADA RTU
- Metal and mining applications
- Machine condition monitoring
- As a distributed I/O module for interface with PLC/DCS/DAS etc

TECHNICAL SPECIFICATIONS

Input

No of channels	4 or 8
Input Type	Thermocouple (E, J, K, T, B, R, S, N), RTD (Pt-100), Current, Voltage
Display Range	Refer Table-1
Accuracy	0.1% of FS + 1 Digit
ADC Resolution	17 bits
Display Resolution	0.1 / 1.0°C
Sampling Rate	TC and Linear Input :100mSec/channel RTD Input: 200mSec/channel
CJC Error	±2.0°C
T/C Burnout current	0.25µA
RTD Excitation current	1 mA (Approx.)
NMRR	> 40dB
CMRR	> 120dB
Temp-co	< 100ppm/°C
Input Impedance	> 1MΩ
Max Voltage	20VDC

Display & Keys

Process Value	4-digit, 0.56", Red seven segment LED
Channel No.	2-digit, 0.56", Green seven segment LED
Group No.	1-digit, 0.56", Red seven segment LED
Status	4 Red LEDs for Relay status, 1 Red LED Auto/Manual mode status, 2 Green LEDs for Communication, 1 Red LED for Fault, 16 Red LEDs for Alarms
Keys	Menu, Escape / A/M, Increment, Shift / Down / ACK

Output

Relay	
No of Relays	4
Type	Single Change over (C, NO, NC)
Rating	2A@250VAC / 30VDC
Time Delay	1 to 99 secs
Retransmission Output (Optional)	
Current	0/4-20mA @ 500Ω Max
Voltage	0/1-5VDC, 0-10VDC @3KΩ Min
Accuracy (DAC)	0.25% of FS
Selection	Max or Min Reading of Channels
Communication Output	
Interface	RS485
Protocol	Modbus RTU
Baud Rate	9600, 19200

Power Supply

Standard	85-265VAC @ 50Hz / 60 Hz / 110-290VDC
Optional	18-36VDC
Power Consumption	15VA Max

Isolation (Withstanding voltage)
Between primary terminals* and secondary terminals**: **At least 1500 V AC for 1 minute**
Between primary terminals* and grounding terminal: **At least 1500 V AC for 1 minute**
Between grounding terminal and secondary terminals**: **At least 1500 V AC for 1 minute**
Between secondary terminals**: **At least 500 V AC for 1 minute**
* Primary terminals indicate power terminals and relay output terminals.
** Secondary terminals indicate Analog I/O signal and Communication O/P.
Insulation resistance: 20MΩ or more at 500V DC between power terminals and grounding terminal.

Physical

Dimension (in mm)	200(H) x 200(W) x 120(D)
Weight	4 Kgs.
Enclosure	Steel sheet, 1.25 mm
Type of Protection	NEMA 4, IP65
Cable Entry Size / No.	6 nos. PG11 glands*
Mounting	Wall Mount
Accessories	4 numbers mounting clamps

Enviromental

Operating Temperature	0-70° C
Storage Temperature	0-80° C
Humidity	30-95% RH non-condensing

Table 1: Display Range

Input Type		Range
Thermocouple	E	-200 °C to 1000 °C
	J	-200 °C to 1200 °C
	K	-200 °C to 1370 °C
	T	-200 °C to 400 °C
	B	450 °C to 1800 °C
	R	0 to 1750 °C
	S	0 to 1750 °C
	N	-200 °C to 1300 °C
RTD	Pt-100	-199.9 to 850.0° C
Linear	-10 - 20mV	-1999 to 9999
	0 - 75mV	
	0 - 100mV	
	0.4 - 2V DC 4-20 mA (Ext.100Ω)	
	0 - 2 VDC 0 - 20mA (Ext 100Ω)	
	0 - 5V	
	1 - 5V	
	0 - 10V	

ORDERING CODE

Model	No. of Input		Input Type		Auxilliary Power Supply		Retransmission Output Type	
8208-IP	4	4 Channels	1	E	U1	85-265 VAC / 110-290VDC	N	None
	8	8 Channels	2	J	U2	18-36 VDC	1	4-20mA
			3	K			2	0-20mA
			4	T			3	1-5 V
			5	B			4	0-5 V
			6	R			5	0-10 V
			7	S				
			8	N				
			9	Pt-100				
			A	-10 to 20mV				
			B	0-75 mV				
			C	0-100 mV				
			D	0-2 V				
			E	0.4-2 V				
			F	0-5 V				
			G	1-5 V				
			H	0-10 V				

**Standard 6 nos. PG11 glands are supplied for both 4/8 channel Scanner. In 8 channel scanner upto 12 nos.PG11 glands can be provided if required at extra cost. Any change in type and no. of glands please consult factory before order placement*

Head Office: Masibus Automation And Instrumentation Pvt. Ltd.
B-30, GIDC Electronics Estate, Sector-25, Gandhinagar-382044, Gujarat, India.
Tel: +91 79 23287275-77, Fax: +91 79 23287281.
E-mail: sales@masibus.com, Web: www.masibus.com

Doc. Ref.8208-IP-R1F/0720