

## Advanced Universal Input Scanner and Alarm Device



# SCN100

SCN100 devices are 144 x 144 mm in size. They are devices designed to measure temperature, pressure, speed, level, humidity, current, voltage, resistance and other physical units of many process variables in industrial environments up to 40 channels and to monitor these units on a single screen. Up to 20 channels can be independent relay outputs. Process data can be transferred to a scale system with the RS485 module. It is used in Food, Plastic, Iron and Steel, Chemistry, Metallurgy, Cement, Ceramics, Petro-Chemistry, Refineries, Glass and other industries. There is one common alarm and one sensor disconnected relay output. They are ergonomic devices whose compliance with international standards, reliability and ease of use have been ensured at the design stage.

### Device Features

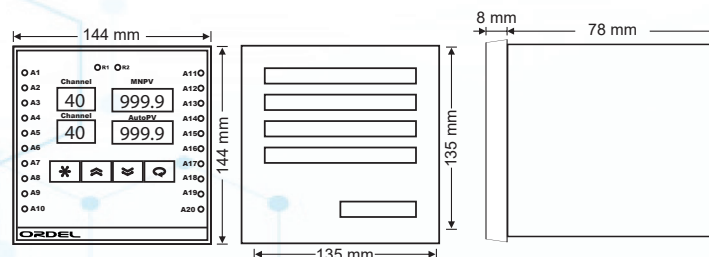
- 2 pcs 4 Digit Numeric Display
- 2 pcs 2 Digit Numeric Display
- 22 pcs Led Display
- 40 Channel Universal Input
- 1 pcs Analog Output (0/4-20mA.0/2-10V)
- 20 pcs Relay Output
- RS485 Modbus RTU
- 220V AC/DC or 24V AC/DC Supply Voltage

- Sensor Disconnected Alarm
- Definitions of the Channel Alarm
- Common Alarm Assignment of Channels
- Simultaneous Automatic and Manual Scanning

### Input Types

Sensor Type	Standard	Min.	Max.
Type-T ( Cu-Const )	IEC60584	-200 °C	300 °C
Type-U ( Cu-Const )	IEC60584	-200 °C	600 °C
Type-J ( Fe-Const )	IEC60584	-200 °C	800 °C
Type-L ( Fe-Const )	IEC60584	-200 °C	900 °C
Type-K ( NiCr-Ni )	IEC60584	-200 °C	1200 °C
Type-E ( Cr-Const )	IEC60584	-200 °C	1200 °C
Type-N ( Nicrosil-Nisil )	IEC60584	0 °C	1200 °C
Type-S ( Pt%10Rh-Pt )	IEC60584	0 °C	1500 °C
Type-R ( Pt%13Rh-Pt )	IEC60584	0 °C	1600 °C
Type-B ( Pt%18Rh-Pt )	IEC60584	0 °C	1800 °C
Pt-100	DIN 43760	-200 °C	850 °C
0 / 4-20 mA		0 mA	20 mA
0 / 2-10 VDC		0 VDC	10 VDC

### Device Dimensions



Panel Cutting Dimensions = 135 ± 0,5 mm x 135 ± 0,5 mm

## Technical Specifications

Power Supply ( PS )	100-240 Vac/dc +10%-15% 24 Vac/dc +10%-20%
Power Consumption	6W, 10VA
Number of Sensor Input	Max 40 Channel Reading ( Varies according to the number of analog input device coding. )
Sensor Input	Thermocouple = B, E, J, K, L, N, R, S, T, U Resistance Thermometer = Pt-100 Current = 0/4-20mA Voltage = 0-50mV, 0/2-10V
Transmitter Supply ( TX )	24V
Analog Output ( O1 )	1 pcs 0/4-20mA, 0/2-10V (to transmit a selected channel)
Relay Output Specifications	1 pcs relay output for alarm sensor broken off(R1) 1 pcs common upper limit alarm ( R2 ) Max 20 Alarm Relay Output ( Each relay can be for analog input separately ) ( AL ) 20 pcs Alarm Relay Outputs (Number of devices varies according to the coding.)
Relay Output ( R1,R2 )	Contact = 250VAC 10A Logic Output = 24Vdc 20mA
Contact Lifetime	No Load = 10.000.000 Switching 250V,10A Resistive Load = 1.000.000 Switching
Communication	1 pcs RS485 MODBUS RTU
Memory	100 Years, 100.000 Renewals
Accuracy	+/- 0,2%
Sampling Time	100 ms
Environment Temperature	Working = -10...+55°C Storage = -20...+65°C
Protection Class	Front Panel = IP54 Trunk = IP20
Dimensions	Width = 144 mm Height = 144 mm Depth = 86 mm
Panel Cutting Dimensions	136 x 136 +/- 0,5 mm
Weight	900 gr

## Modular Structure and Connection Diagram

+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -
31	32	33	34	35	36	37	38	39	40					

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21	22	23	24	25	26	27	28	29	30					

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11	12	13	14	15	16	17	18	19	20					

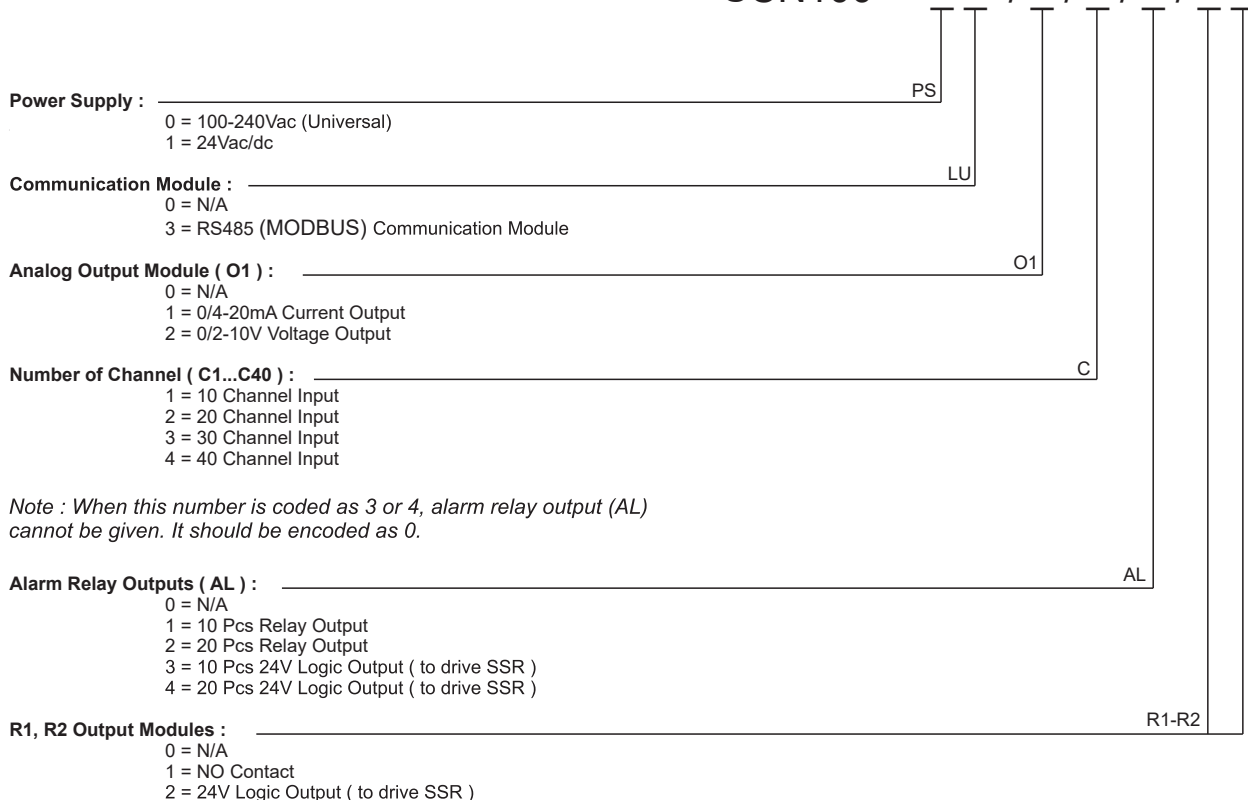
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1	2	3	4	5	6	7	8	9	10					

O1	RS485
- +	A B C

R2	R1	Pt-100 COM	PS

## Product Code

SCN100 -



Note: R1 for common alarm output,  
R2 is used for the sensor break alarm output.