Advanced Universal Input Scanner and Alarm Device

SCN12

SCN12 devices are 96 x 96 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 up to 12 channels and to monitor these units on a single screen. 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
4 pcs Led Display
12 Channel Universal Input
1 pcs Analog Output (0/4-20mA.0/2-10V)
2 pcs Relay Output
RS485 Modbus RTU
220V AC/DC or 24V AC/DC Supply Voltage

Sensor Disconnected Alarm
Limit Timeout Warning of Channels
Simultaneous Automatic and Manual Scanning
Averaging Between Selected Channels

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

96 mm
96 mm
91 mm
10 mm
100 mm
91 mm
91 mm
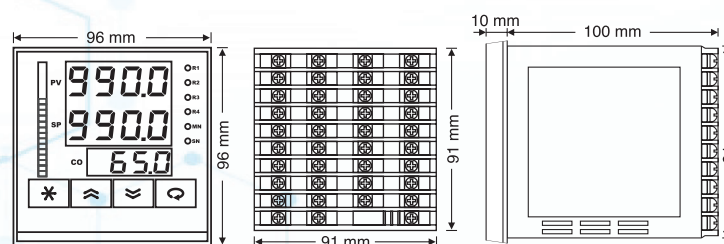
Panel Cutting Dimensions = 92 ± 0,5 mm x 92 ± 0,5 mm

Technical Specifications
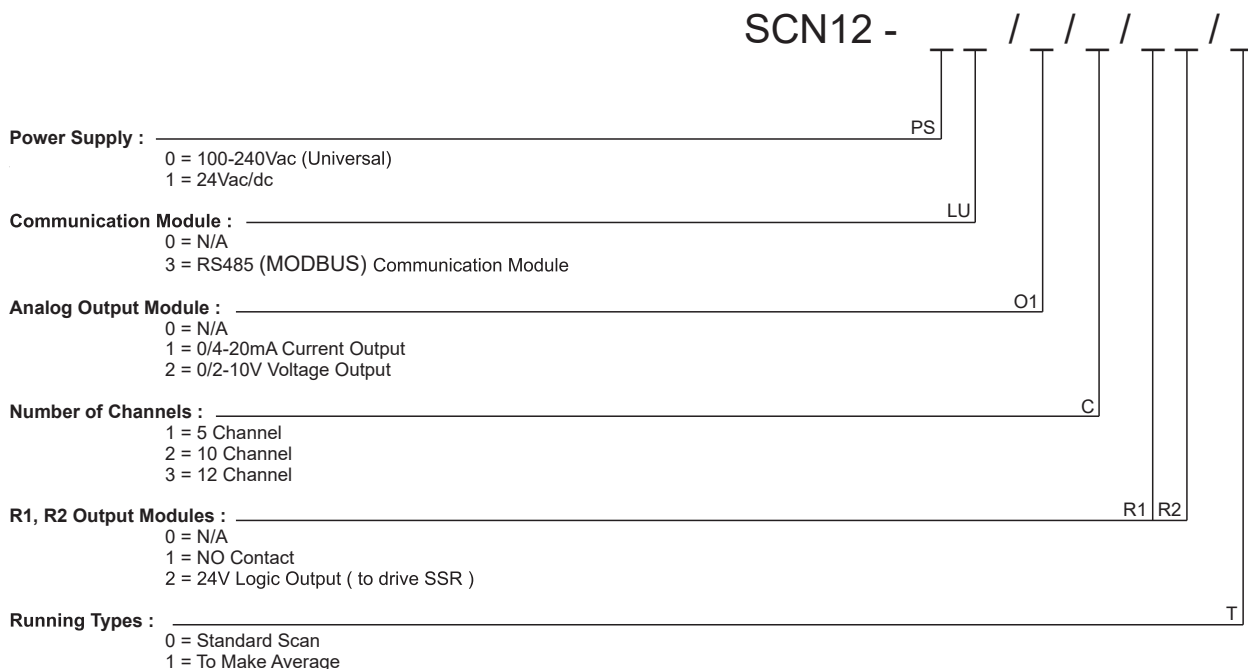
Power Supply (PS)	100-240 Vac/dc +10%-15% 24 Vac/dc +10%-20%
Power Consumption	6W, 10VA
Number of Sensor Input	Max 12 Channel Reading (Varies according to the number of analog input device coding.)
Sensor Inputs	Thermocouple = B, E, J, K, L, N, R, S, T, U Resistance Thermometer = Pt-100 Current = 0/4-20mA Voltage = 0-50mV, 0/2-10V
Communication	1 pcs RS485 MODBUS RTU
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)
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
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 = 96 mm Height = 96 mm Depth = 110 mm
Panel Cutting Dimensions	92 +/- 0,5 mm x 92 +/- 0,5 mm
Weight	430 gr

Modular Structure and Connection Diagram
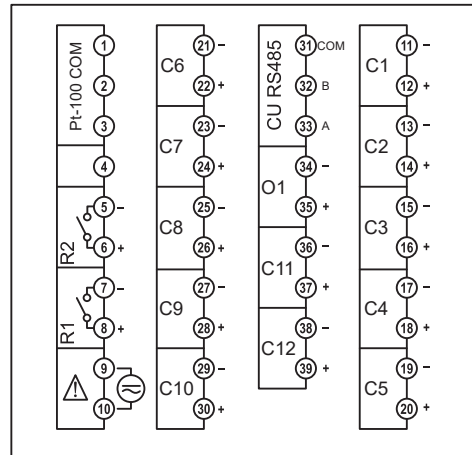
Module	Description
C1....C12	Universal sensor input modules.
CU	RS485 Communication Module
O1	Analog output (The content of this module is determined by the product code).
R1, R2	Relay Output Modules
PS	Supply voltage input (Supply voltage is determined by product code).

Product Code

SCN12 - _ _ / _ / _ / _ _ / _

Power Supply :
    0 = 100-240Vac (Universal)
    1 = 24Vac/dc

Communication Module :
    0 = N/A
    3 = RS485 (MODBUS) Communication Module

Analog Output Module :
    0 = N/A
    1 = 0/4-20mA Current Output
    2 = 0/2-10V Voltage Output

Number of Channels :
    1 = 5 Channel
    2 = 10 Channel
    3 = 12 Channel

R1, R2 Output Modules :
    0 = N/A
    1 = NO Contact
    2 = 24V Logic Output (to drive SSR)

Running Types :
    0 = Standard Scan
    1 = To Make Average

PS
LU
O1
C
R1 R2
T

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

ORDEL