

# NIPPON INDIA



## NI-SC-8/16

TEMPERATURE SCANNER



## BRIEF INTRODUCTION >>>

TEMPERATURE SCANNER WITH AUTOMATIC SMD PACKAGING TECHNOLOGY, HAS A STRONG ANTI-JAMMING CAPABILITY. IT CAN BE USED IN CONJUNCTION WITH VARIOUS SENSORS, TRANSMITTERS TO DISPLAY TEMPERATURE, PRESSURE, LIQUID LEVEL, SPEED, FORCE AND OTHER PHYSICAL PARAMETERS, WITH COMMON ALARM AND RS-485 MODBUS COMMUNICATION

## APPLICATIONS >>>

ENVIRONMENTAL PROTECTION / SCIENCE AND EDUCATION / AUTOMATION INDUSTRY / CHEMICALS & PHARMA INDUSTRY / R&D LABORATORY ETC.

## 8/16 INPUT CHANNEL >>>

1. CURRENT SIGNAL:  $\pm 4 \sim 20$ MA CURRENT SOURCE
2. VOLTAGE SIGNAL:  $-100 \sim 100$ V,  $-10 \sim 10$ V,  $-1000 \sim 1000$ MV,  $-100 \sim 100$ MV VOLTAGE SOURCE
3. THERMOCOUPLE: R, S, B, K, E, T, J, N (CONFORM TO NIST ITS-90 STANDARD)
4. RTD SENSOR: 3-WIRE PT100, PT1000 (CONFORM TO EN 60751(ITS-90) STANDARD)

## COMMUNICATION INTERFACE >>>

1. RS485 SERIAL PORT - MODBUS

### TECHNICAL PARAMETERS>>>

INPUT				
INPUT SIGNALS	CURRENT	VOLTAGE	RESISTANCE	TC
INPUT IMPEDANCE	≤250Ω	≥500KΩ		
MAX I/P CURRENT	≤30mA			
MAX I/P VOLTAGE		≤6V		
OUTPUT				
OUTPUT SIGNALS	CURRENT	VOLTAGE	RELAY	24V DISTRIBUTION OR FEEDER
Output load capability	≤500Ω	≥250 KΩ (Note: Please replace the module for higher load capacity)	AC220V/3Ax DC24V/3A	≤30mA

### COMPREHENSIVE PARAMETER >>>

Accuracy	0.2%FS±1 bit
Setting modes	Panel touch key setting parameter setting values locked; store the setting values permanently
Display style	-1999 ~ 9999 display range 0 ~ 100% measured value lightness bargraph display; LBD display for working state
Working environment	Ambient temperature: 0 ~ 50 °C; Relative humidity: ≤ 85% RH; Far from strong corrosive gas
Power supply	AC 100 ~ 240V (switch power), (50/60HZ); DC 20 ~ 29V (switch power)
Power	≤4W
Frame	Standard Snap-On
Communication	Standard MODBUS communication protocol, RS-485, communication distance up to 1 km.

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## MEASUREMENT PARAMETERS >>>

SERIAL NUMBER	SIGNAL TYPE	RANGE OF MEASUREMENT	SERIAL NUMBER	SIGNAL TYPE	RANGE OF MEASUREMENT
1	B	400~1800°C	18	Linear resistance 0~400Ω	-1999~9999
2	S	0~1600°C	19	Remote Resistance 0~350Ω	-1999~9999
3	K	0~1300°C	20	Remote Resistance 30~350Ω	-1999~9999
4	E	0~1000°C	21	0~20mV	-1999~9999
5	T	-200.0~400.0°C	22	0~40mV	-1999~9999
6	J	0~1200°C	23	0~100mV	-1999~9999
7	R	0~1600°C	24	-20~20mV	-1999~9999
8	N	0~1300°C	25	-100~100mV	-1999~9999
9	F2	700~2000°C	26	0~20mA	-1999~9999
10	WRE3-25	0~2300°C	27	0~10mA	-1999~9999
11	WRE5-26	0~2300°C	28	4~20mA	-1999~9999
12	CU50	-50.0~150.0°C	29	0~10V	-1999~9999
13	CU53	-50.0~150.0°C	30	0~10mA square	-1999~9999
14	CU100	-50.0~150.0°C	31	0~10V	-1999~9999
15	PT100	-200.0~650.0°C	32	0~10mA square	-1999~9999
16	BA1	-200.0~600.0°C	33	4~20mA square	-1999~9999
17	BA2	-200.0~600.0°C			

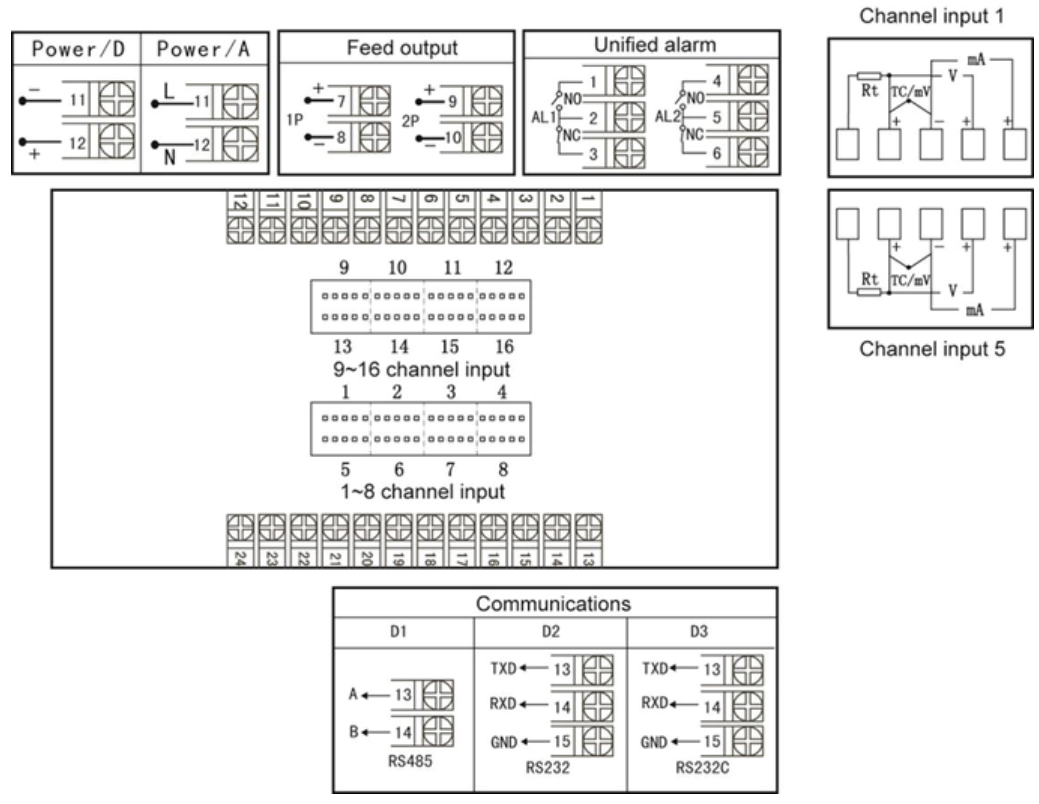
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## WIRING DIAGRAM >>>



## COMMUNICATION >>>

TECHNICAL SPECIFICATION: RS-485 MODBUS COMMUNICATION IN 1200~9600 BPS.  
 DATA FORMAT : ONE STARTING BIT, EIGHT DATA BITS AND ONE STOPPING BIT.

★ SPECIFIC PARAMETERS SEEN IN THE "INSTRUMENT COMMUNICATION HANDBOOK".



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