

# INDICATOR WITH ALARMS

## VALUE RANGE

- COMPACT DESIGN WITH VERY LOW DEPTH
- TC/RTD/ANALOG INPUTS
- TRANSMITTER SUPPLY (OPTIONAL)
- LARGE DISPLAY
- 2 RELAYS
- IP66 / NEMA 4X (OPTIONAL)



**NEX301**  
48x48x61



**NEX302**  
48x96x35



**NEX307**  
245x145x90

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### FEATURES

- Compact : 48x48x61 mm  
48x96x35 mm  
250x150x95 mm (Flameproof)
- Large display : 16.3 mm (48x48)  
20.32 mm (48x96, Flameproof)
- TC, RTD, Analog input
- Input sampling cycle 200ms
- 1 or 2 setpoints
- Optional IP66 front
- ON/OFF control/ Alarm outputs
- 85~265 V AC SMPS
- User friendly operation

### SPECIFICATIONS

All specifications at ambient of 25 °C unless specified otherwise

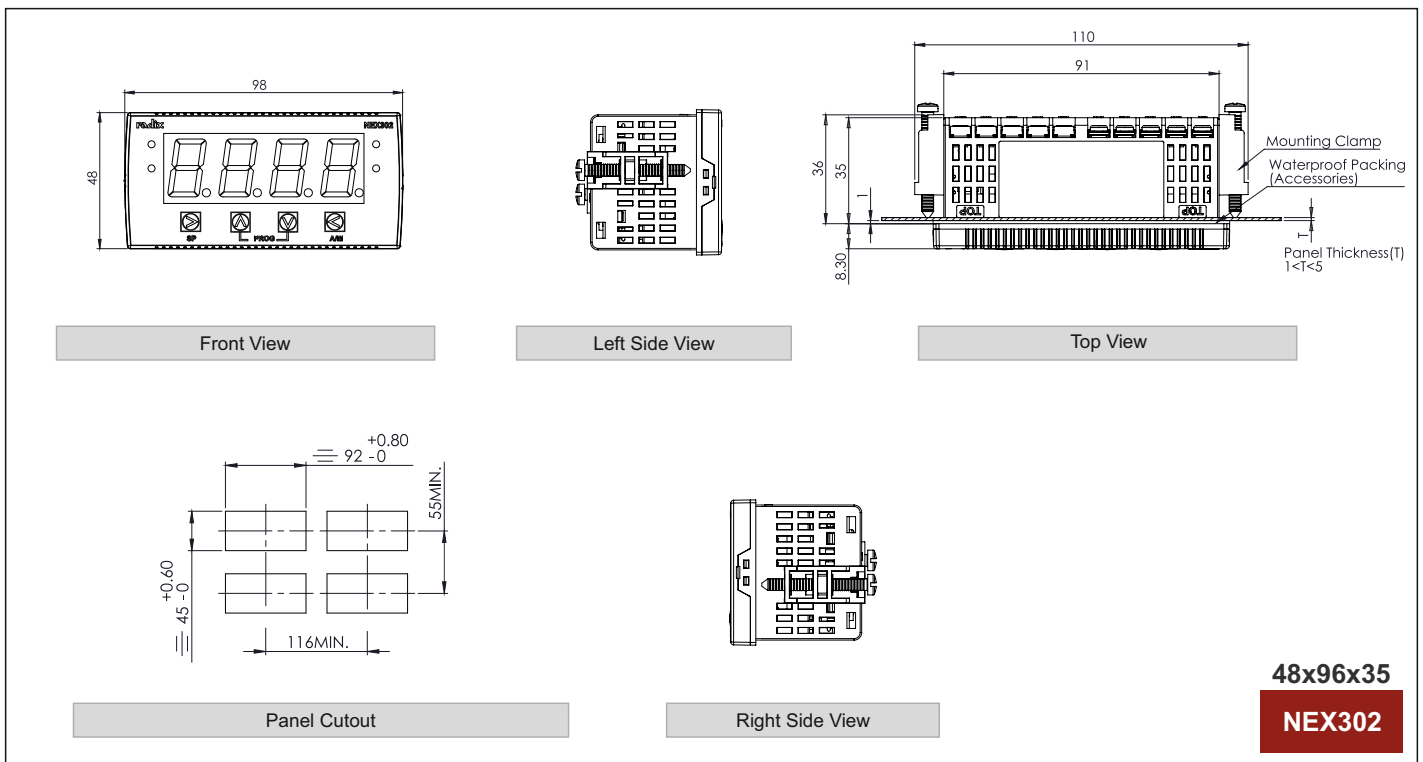
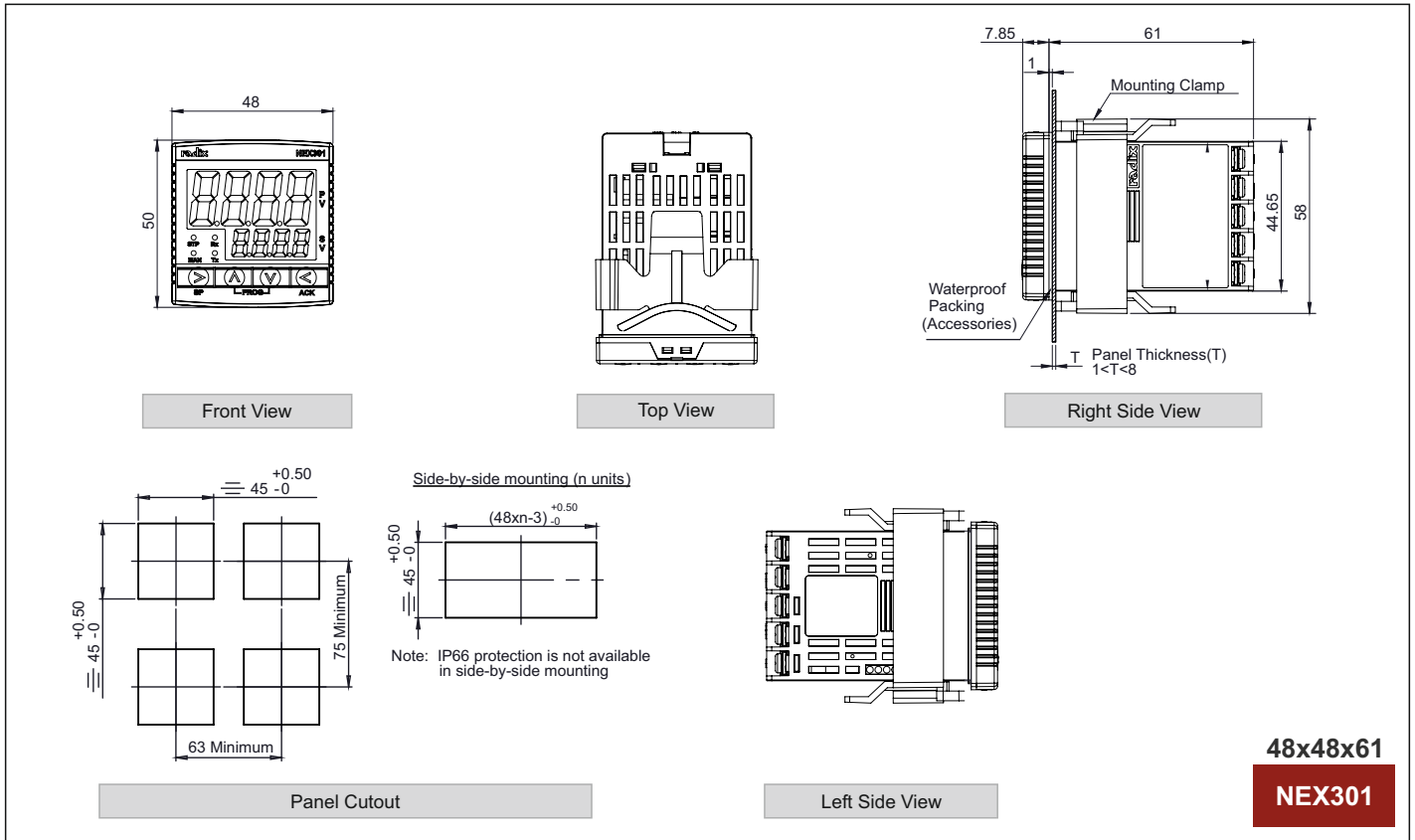
<p><b>INPUTS</b></p> <p>Input</p> <p>Thermocouple RTD Voltage Current</p> <p>Transmitter supply Sampling time Range limits Accuracy</p> <p>Warm up time for specified accuracy Cold junction compensation</p>	<p>J, K, R, S, T Pt100, 3-wire 0~10 V 0~20mA / 4~20mA 22 V nominal, 30mA max 200 ms See Table 1 Thermocouple : ± 0.25% of FS ±1 °C Pt100 : ± 0.05% of FS ±1 °C Analog Inputs : ± 0.25% of FS ±1 digit 30 minutes</p> <p>Automatic</p>	<p><b>ENCLOSURE</b></p> <p>See Table 2 and Fig.1</p> <p><b>TEMPERATURE, HUMIDITY</b></p> <p>Ambient operating temperature Relative operating humidity</p> <p>-10 to 50 °C Below 90% RH, non-condensing</p> <p><b>PROGRAMMABLE PARAMETERS</b></p> <p>Setpoint Unit Resolution High scale Low scale Digital filter Bias Band (P) Hysteresis (ON/OFF control) Relay logic</p> <p>Full range (See Table 1) °C, °F User selectable 0.1 or 1 Full range (See Table 1) Full range (See Table 1) Low, High, None -99.9 ~ 99.9 0.1~999.9, 0~100% of span 0.1-999.9 a. Heat b. Cool c. Full scale high alarm d. Full scale low alarm e. Deviation high alarm f. Deviation low alarm g. Inband alarm h. Outband alarm Auto/Latch/Latch-hold (at power on) Through key ON, OFF</p> <p>Alarm types Alarm acknowledge Setpoint lock</p>
<p><b>OUTPUTS</b></p> <p>No. of setpoints No. of relays Relay contact type Relay contact rating</p> <p>SSR drive</p>	<p>1 or 2 See Table 2 See Table 2 7A/250 V AC (NO-C-NC) 5A/250 V AC (NO-C) 12 V DC drive signal for external SSR</p>	
<p><b>INDICATION</b></p>	<p>See Table 2</p>	
<p><b>POWER SUPPLY</b></p> <p>Supply voltage</p>	<p>a) 85~265 V AC, 50/60 Hz b) 20~30 V DC</p>	
<p><b>ISOLATION</b></p> <p>Mutual isolation between input, supply, relays</p>	<p>1500 VAC rms, 50Hz / 1 minute</p>	

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## VALUE RANGE

DIMENSIONS mm

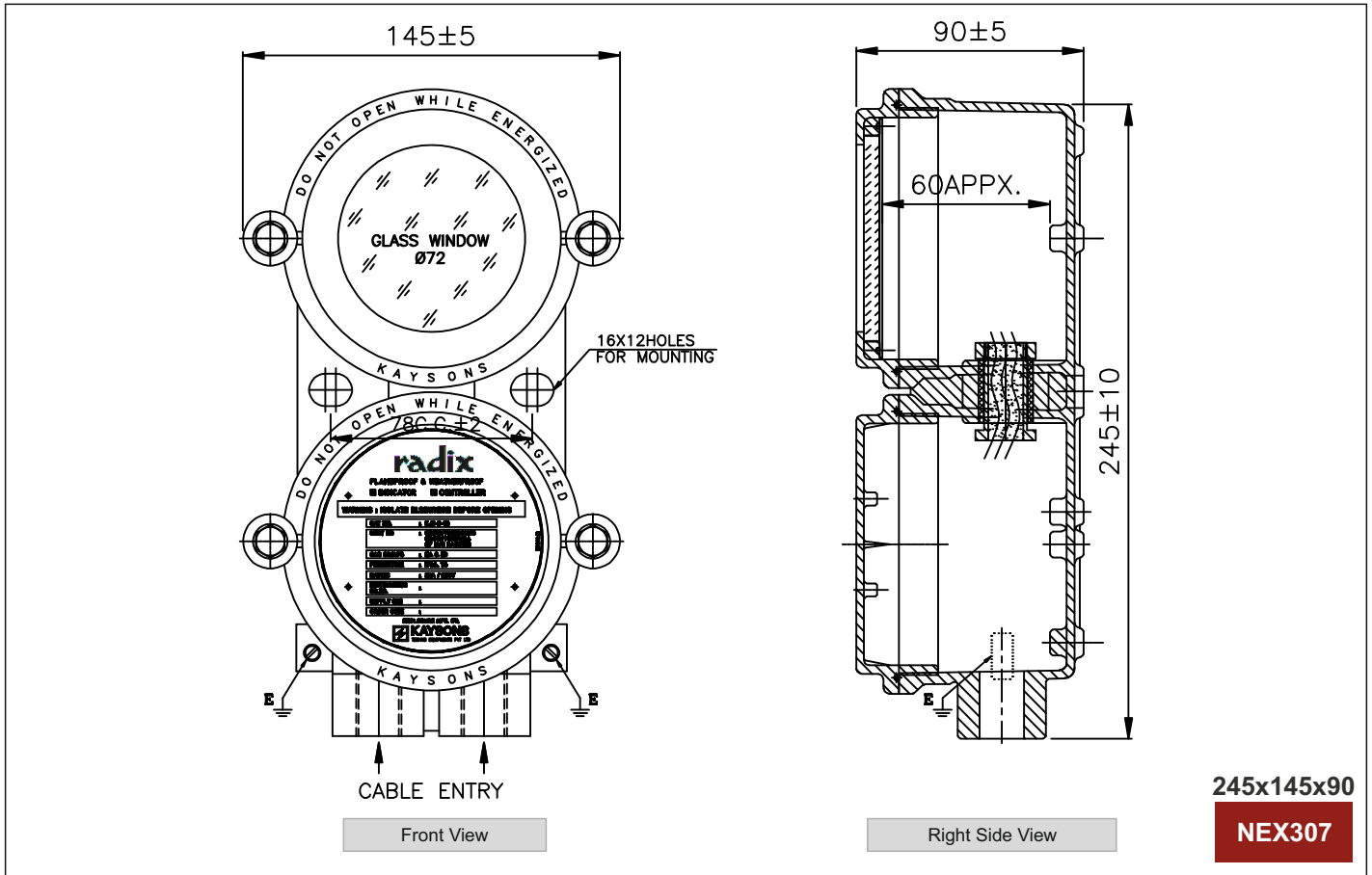
Fig.1



# INDICATOR WITH ALARMS

## VALUE RANGE

### DIMENSIONS mm



245x145x90

NEX307

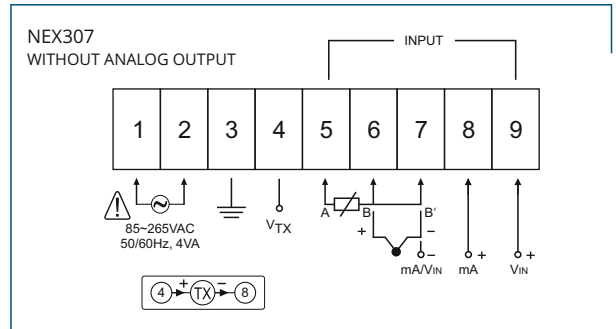
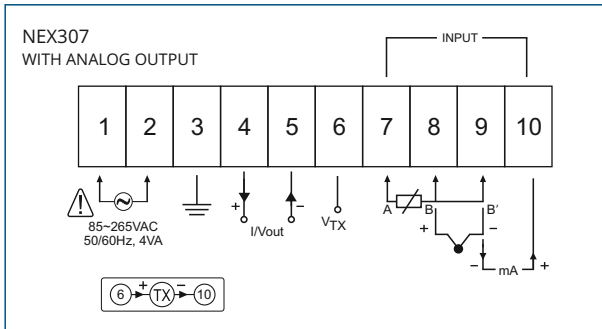
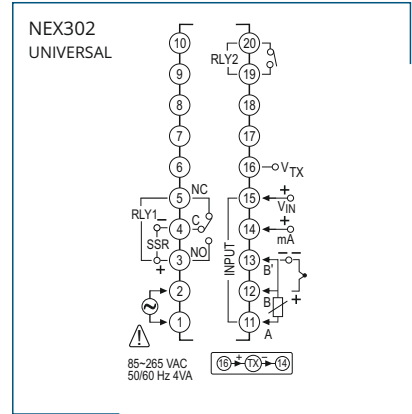
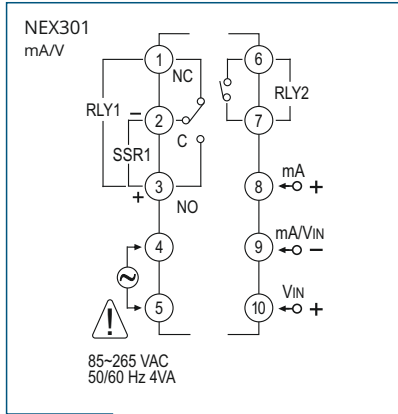
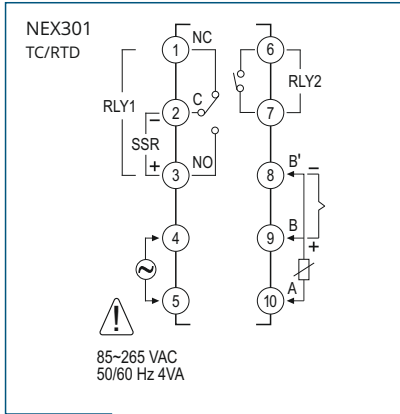
### TABLE 1

SENSOR / INPUT	RANGE LIMITS (°C / EU)	
	LOW SCALE	HIGH SCALE
Iron / Constantan (J)	-100	850
Chromel / Alumel (K)	-200	1370
Pt / Pt - 13% Rh (R)	0	1700
Pt / Pt - 10% Rh (S)	0	1700
Copper / Constantan (T)	-200	400
Pt100, 3-wire	-200	850
0~20mA/4~20mA	-1999	9999
0~10 V	-1999	9999




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### CONNECTION DIAGRAM



### TABLE 2

Product Photo			
Model	NEX301	NEX302	NEX307
Inputs type	TC, RTD, Analog Inputs		
Size	48H x 48W x 61D mm	48H x 96W x 35D mm	245H x 145W x 90D mm
Display	Upper 0.64" / 16.3 mm Lower 0.354" / 9 mm	0.8" / 20.32 mm	0.8" / 20.32 mm
Relay output	Maximum - 2		Maximum - 1
Analog output	Not available		Maximum - 1
Communication	Not available		
Transmitter excitation supply	Optional		
Mounting	Panel		Wall / Pipe
Terminals	M3 Screw, suitable for 2.5 mm <sup>2</sup> wire		
Housing Material	ABS Plastic, Grade: UL94V-0		Die cast Al. Alloy
Protection	Front IP66 (IEC) / NEMA 4X (When properly installed using IP66 kit) Rear (behind panel) IP20 (IEC)		IP66
Certification	-		Flameproof, Gr IIA & IIB
Cable gland	-		3/4" ET, 2/3 cable entries available
Weight	Approx. 100 gm	Approx. 150 gm	Approx. 1.8 kg

# INDICATOR WITH ALARMS VALUE RANGE

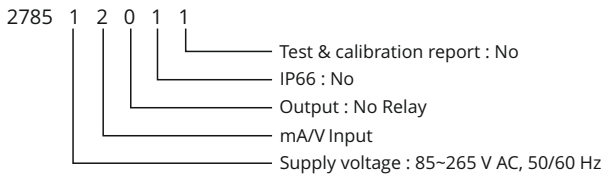
## ORDERING INFORMATION

### MODEL : NEX301

STANDARD ORDER CODES \*

Product code	2785					
Supply voltage	1					85~265 V AC, 50/60 Hz
	2					20~30 V DC
Input		1				TC/RTD
		2				mA/V without Tx
		3				mA/V with Transmitter Supply
Output			0			No Relay
			1			2 x Relays
IP66				1		No
				2		Yes
Test & calibration report					1	No#
					2	Yes**

### EXAMPLE

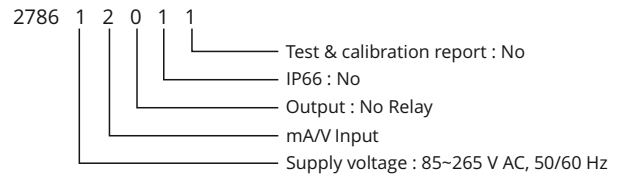


### MODEL : NEX302

STANDARD ORDER CODES \*

Product code	2786					
Supply voltage	1					85~265 V AC, 50/60 Hz
	2					20~30 V DC
Input		1				TC/RTD
		2				mA/V without Tx
		3				TC/RTD/mA/V with Transmitter Supply
Output			0			No Relay
			2			2 x Relay
IP66				1		No
				2		Yes
Test & calibration report					1	No#
					2	Yes**

### EXAMPLE

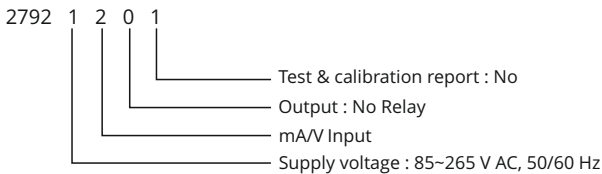


### MODEL : NEX307

STANDARD ORDER CODES \*

Product code	2792					
Supply voltage	1					85~265 V AC, 50/60 Hz
	2					20~30 V DC
Input		1				TC/RTD
		2				mA/V without Tx
		3				TC/RTD/mA with Transmitter Supply
Output			0			No Relay
			1			1 x Relay
			2			1 x Analog Output
Test & calibration report				1		No#
				2		Yes**

### EXAMPLE



## PREFERRED ORDER CODES

Product	Order Code	Brief Specs
NEX301	2785 12011	mA/V input, no Tx supply, SMPS
NEX302	2786 11011	TC/RTD input, no Tx supply, SMPS
NEX302	2786 12011	mA/V input, no Tx supply, SMPS
NEX302	2786 13011	TC/RTD/mA/V input, Tx supply, SMPS
NEX307	2792 1101	TC/RTD input, no Tx supply, SMPS
NEX307	2792 1301	TC/RTD/mA input, Tx supply, SMPS

- \* Minimum order quantity & value will apply.
- \* See Preferred Order Codes list. For order codes outside this list, larger MOQ will apply. Contact sales.
- # Certificate Of Conformance is included
- \*\* Chargeable

CAT#656R2/A

### ENQUIRIES

Instruments: sales@radix.co.in  
Sensors: sensors@radix.co.in  
Gauges: gauges@radix.co.in  
Automation: automation@radix.co.in  
Level: level@radix.co.in

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