

6 DIGIT HIGH PRECISION UNIVERSAL PROCESS INDICATOR

MODEL : PI – 541A



INTRODUCTION

SANSEL offers PI 541A High precision universal process indicator are extremely versatile Indicators that can be used for a wide variety of applications in all type of process industries. These Universal indicator offer high precision 6 digit resolution & extreme reliability and low cost for Process measurement. PI 541A is a Microprocessor based instrumentation ensures accurate readings for all Linear Parameters, RTD, ohms & different type of Thermocouples. A number of programmable features including In-line calibration are standard.

PI541A can offer relay outputs for signals exceeding set points, optional Programmable 4 -20mA or 0 - 10V DC Isolated output and also Optional RS 485 (2 wire) MODBUS protocol output is provided.

Applications

Monitoring, recording, controlling in all type of process industries for the following applications,

- Temperature
- Humidity
- Pressure
- pH / ORP
- TDS / Conductivity
- Flow
- Level
- Voltage / Current / Power
- Resistance
- Load cell and more...,

FEATURES

- ✓ 6 digit 7 segment RED LED display
- ✓ High accuracy
- ✓ Compact size
- ✓ 24 Bit ADC resolution
- ✓ Universal inputs RTD, Thermocouples, mA, mV, voltage, Ohms
- ✓ Wide selectable display range between -199999 to 199999 counts
- ✓ Easy field configurable with front key calibration
- ✓ No hardware selection for the input signals
- ✓ Optional opto isolated Re-transmission output
- ✓ Optional RS 485 (2 wire) MODBUS protocol
- ✓ 24V DC external sensor excitation supply
- ✓ Programmable decimal point & display noise filter
- ✓ Universal supply Voltage 90 to 270 AC / DC

Specifications

Model		PI – 541A
Display		6 Digit 7 segment RED LED
Inputs		0 - 20 mA, 0 to 75 mV, -10 to 10 V DC, 0 – 400 Ω (H & L Limit Programmable) RTD - PT 100, Thermocouple - J, K, R, S, T, B, N, E
Display Range*	Analog - RTD & TC -	-199999 to 199999 (H & L Limit Programmable) RTD - PT 100 (-199 to 850°C / 327 to 1562°F) (H & L Limit Programmable) RTD - PT 1000 (-50 to 400°C / -58 to 752.0°F) TC - J (- 200 to 200°C / -328.0 to 2192°F) TC - K (- 200 to 1372°C / -327 to 2501°F) TC - R (- 40 to 1768°C / -40 to 3214°F) TC - S (- 40 to 1768°C / -40 to 3214°F) TC - T (- 200 to 400°C / -328 to 752°F) TC - B (300 to 1820°C / 572 to 3308°F) TC - N (-200 to 1300°C / -327 to 2372°F) TC - E (-200 to 999°C / -327 to 1832°F)
Accuracy		± 0.1 % of FS for Analog , ± 2 °C for TC and better than ± 0.2°C for RTD
Resolution		0.0001 / 0.001 / 0.01 / 0.1 / 1°C Selectable for Analog 0.01°C for RTD - PT 100 and 0.1°C for TC
Unit selection		°C / °F (for RTD & TC inputs)
linearization		Programmable custom Linearization provided (1 - 21 points)
Input signal filter		1 – 100% user configurable
Cold junction compensation		Automatic inbuilt 'CJC' is provided
Relay Output* (optional)		2 Relay (5A rated) with 4 Relay Status Selection, Hysteresis, Cyclic Delay
Alarm settings		Front key settable
Alarm indication		Two LED on front panel
Re Transmission* (optional)		Opto Isolated Analog Output 4 - 20 mA or 0 - 10V DC for process variable
PC communication* (optional)		RS 485 (2 wire) with MODBUS protocol
PC Software* (optional)		Monitoring, Data logging, Report & graph
Sensor excitation Supply		24 V DC ±10% @ 100 mA
Power supply		90 to 270 V AC / DC / 50/60 Hz
Front panel		IP 65 protection
Overall Dimension		48(H) X 96(W) X 110(D) mm
Cut out Dimension		44(H) x 90(W) mm
Housing		Panel mountable ABS plastic
Operating environment		0 to 50°C / 5 to 95% RH non condensing
Enclosure		ABS Plastic
Weight (Approx.)		350 grams

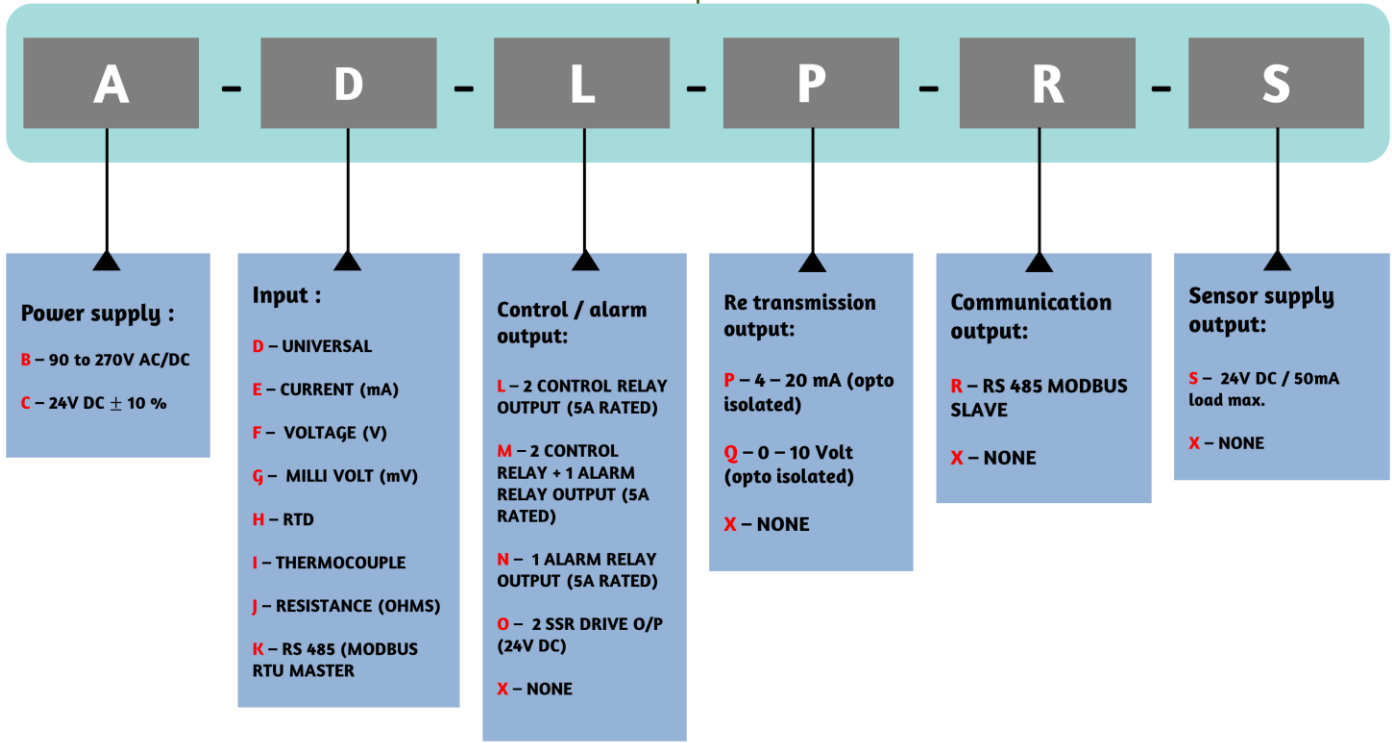
NOTE: Due to continuous improvement published specifications may change without notice

** Relay & Retransmission or PC communication any one was possible in one PI 542A

* Refer ordering information optional to select any one display size

ORDERING INFORMATION FOR 4 DIGIT PROCESS INDICATOR

MODEL : PI 541A -A - D - L - P - R - S



S.NO.	ERP item code	ordering code	power supply	Display	Input	Control / alarm output	Re transmission output	Communication output	Sensor supply output
1	FIGD-00051	PI 541A-B-D-L-P-R-S	90 to 270V AC/DC	0.5" 5.5 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
2	FIGD-00110	PI 541A-B-D-L-X-X-S	90 to 270V AC/DC	0.5" 5.5 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	NONE	NONE	24V DC / 50mA load max.
3	FIGD-00111	PI 541A-B-D-L-P-X-S	90 to 270V AC/DC	0.5" 5.5 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	NONE	24V DC / 50mA load max.
4	FIGD-00112	PI 541A-B-D-X-P-R-S	90 to 270V AC/DC	0.5" 5.5 DIGIT	UNIVERSAL	NONE	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
5	FIGD-00113	PI 541A-B-D-X-P-X-S	90 to 270V AC/DC	0.5" 5.5 DIGIT	UNIVERSAL	NONE	4 - 20 mA (opto isolated)	NONE	24V DC / 50mA load max.
6	FIGD-00114	PI 541A-B-D-X-X-R-S	90 to 270V AC/DC	0.5" 5.5 DIGIT	UNIVERSAL	NONE	NONE	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
7	FIGD-00115	PI 541A-B-D-X-X-X-S	90 to 270V AC/DC	0.5" 5.5 DIGIT	UNIVERSAL	NONE	NONE	NONE	24V DC / 50mA load max.

SANSEL INSTRUMENTS AND CONTROLS SANSEL CALIBRATION LABORATORIES

ISO/IEC 17025 Accredited Calibration Laboratory by NABL CC - 2879
(Thermal, Mechanical, Electro-Technical, Dimension Parameters)

1 / 46 , 3rd Main road, Ganga Nagar, MMDA Colony , Maduravoyal , Chennai - 600 095. INDIA
 ☎ +91 44 2378 3951, 📞 +91 72999 72085 / 86 / 93, 📠 +91 98401 49928 ✉ enquiry@ sansel.net

🌐 www.sansel.net

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