

# 4" 4 DIGIT JUMBO PROCESS INDICATOR

MODEL : PIJ – 542 A1



360° Rotate clamp

## INTRODUCTION

In the world of modern industrial and manufacturing environments, efficiency, productivity and safety are paramount. To achieve optimal performance, Operators and supervisors rely on advanced tools and technologies that provide real-time insights into the status of critical processes parameter to view from a long distance. One such tool is the jumbo display indicator, This series of big display indicators has a display height of 2",4",8" and 12" sizes, which are visible distance from 50 feet, 100 feet, 200 feet and 400 feet.

These Large size Display Indicator serves as a beacon of information, offering clear and immediate visibility into the ongoing wide range of process parameter applications such as Temperature, Humidity, Pressure, Flow, Level, pH, TDS, Conductivity, Production counting, RPM, Timing, Power, Voltage, Current, Frequency etc.,. these large displays play a pivotal role in keeping operations running smoothly.

We offer customization options to tailor our big display indicators to your specific needs, applications are multiple indicators with different parameters in one panel.

## Applications

**Our big display indicators cater to a wide range of industries, including but not limited to:**

- Manufacturing
- Oil & Gas
- Automobile
- Chemical Processing
- Power Generation
- Food & Beverage
- Pharmaceuticals

## Descriptions

The PIJ 542 A1 Jumbo display universal input process indicator is incorporated with high accuracy 24bit ADC , 6-digit industrial display indicator accept any one input from Thermocouple, RTD, mV, mA and Resistance, with the capability of measuring and indicating temperature, pressure, flow, level and other process variables. The standard PIJ 542 A1 provides a retransmission output, alarm relay outputs and RS-485 MODBUS communications can be added to suit your applications. The input and output are easily configurable by front panel keys. The PIJ 542 A1 has been designed to provide reliable indications in the harshest environments.

## FEATURES

- ✓ Different display heights 2", 4", & 8"
- ✓ High accuracy
- ✓ Compact size
- ✓ 24 Bit ADC resolution
- ✓ Selectable inputs RTD, all types of Thermocouples, mA, mV, Voltage, Ohms
- ✓ Wide selectable display range between -1999 to 9999 counts
- ✓ Easy figure configurable with front key calibration
- ✓ No hardware selection for the input signals
- ✓ Optional opto isolated Re-transmission output
- ✓ Optional RS 485 (2 wire) output for PC communication with MODBUS RTU protocol
- ✓ Optional PC software with monitoring, logging, report & graph
- ✓ 24V DC external sensor supply
- ✓ Programmable decimal point & display noise filter
- ✓ Universal supply voltage 90 to 270 AC / DC
- ✓ Universal mounting options-hanging, wall mounting, table top, etc.,. With rotatable display to adjust the viewing angle.

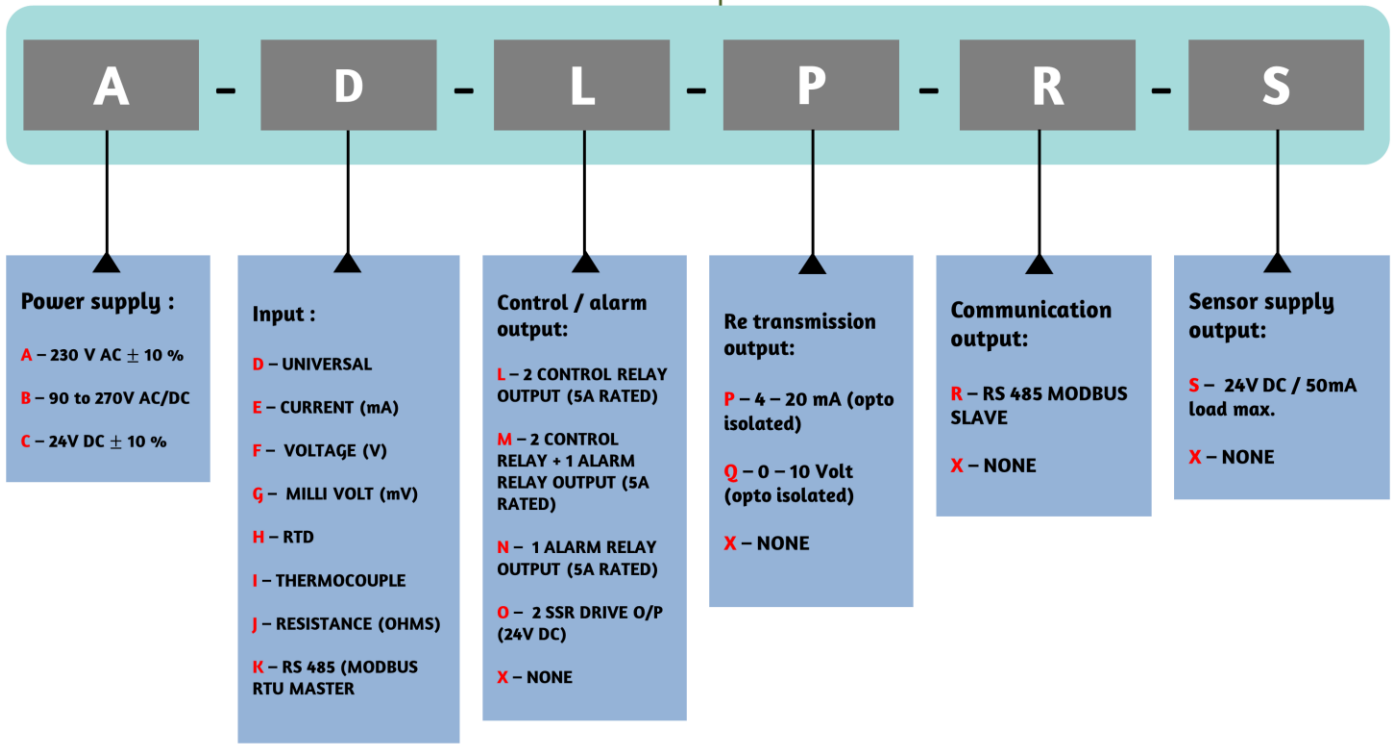
# Specifications

Model	PIJ – 542 A1
Display	2" or 4" or 8" 4 Digit 7 segment RED LED*
Accuracy	± 0.1 % of FS
Analog inputs	4 – 20 mA, 0 – 20 mA, 0 to 70 mV, 0 to 10 V DC, 0 – 400 Ω (H & L Limit Programmable)
Temperature inputs	RTD - PT 100, Thermocouple - J, K, R, S, T, B, N, E
Analog display range	-1999 to 9999 (H & L Limit programmable)
Temperature range (H & L Limit programmable)	RTD - PT 100 (-199.9 to 850.0°C / -199.9 to 999.9 °F) TC - J (- 200 to 1200°C / -328 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 999.9°C / -327 to 1832°F)
Unit selection	°C / °F ( for RTD & TC inputs)
Analog input display resolution	0.001 / 0.01 / 0.1 / 1 (Selectable)
Temperature resolution	0.1 / 1 °C / °F (optional 0.01 for RTD - PT 100 I/P up to 99.99 °C Factory presetable)
Filter constant	1 – 100% (Adjustable)
Display hold option	Peak, hold & average (any one selectable)
Hold delay	0 - 999 sec (selectable)
Relay Output (optional)	2 Relay (5A rated) with 6 Relay Status Selection, Adjustable, Hysteresis, Cyclic Delay
Temperature drift	≤ 0.1% FS/°C (typical 50 ppm)
Re Transmission (optional)	Opto Isolated Analog Output 4 - 20 mA or 0 - 10V DC
PC communication (optional)	RS 485 (2 wire) MODBUS RTU protocol
PC interface software	Optional
Sensor Supply (external)	24 V DC ±10% @ 100 mA
Power supply	230 V AC / 50 Hz
Overall dimension	428 x 171 x 85 (L x H x D) mm (Approx.)
Housing	MS Powder coating
Mounting	Wall or sealing with 360 ° rotatable clamp
Operating environment	0 - 50°C / 5 to 95% RH Non condensing
Weight (Approx.)	4.5 kg

**NOTE:** Due to continuous improvement published specifications may change without notice  
\*Refer ordering information optional to select any one display size

# ORDERING INFORMATION FOR 4 DIGIT JUMBO PROCESS INDICATOR

MODEL : PIJ 542A1 -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-00087	PIJ 542A1-A-D-L-P-R-S	230 V AC $\pm$ 10 %	4" 4 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
2	FIGD-00088	PIJ 542A1-A-D-L-X-X-S	230 V AC $\pm$ 10 %	4" 4 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	NONE	NONE	24V DC / 50mA load max.
3	FIGD-00089	PIJ 542A1-A-D-L-P-X-S	230 V AC $\pm$ 10 %	4" 4 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	NONE	24V DC / 50mA load max.
4	FIGD-00090	PIJ 542A1-A-D-X-P-R-S	230 V AC $\pm$ 10 %	4" 4 DIGIT	UNIVERSAL	NONE	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
5	FIGD-00052	PIJ 542A1-A-D-X-P-X-S	230 V AC $\pm$ 10 %	4" 4 DIGIT	UNIVERSAL	NONE	4 - 20 mA (opto isolated)	NONE	24V DC / 50mA load max.
6	FIGD-00091	PIJ 542A1-A-D-X-X-R-S	230 V AC $\pm$ 10 %	4" 4 DIGIT	UNIVERSAL	NONE	NONE	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
7	FIGD-00025	PIJ 542A1-A-D-X-X-X-S	230 V AC $\pm$ 10 %	4" 4 DIGIT	UNIVERSAL	NONE	NONE	NONE	24V DC / 50mA load max.
8	FIGD-00042	PIJ 542C1-A-D-L-P-R-S	230 V AC $\pm$ 10 %	8" 4 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
9	FIGD-00092	PIJ 542C1-A-D-L-X-X-S	230 V AC $\pm$ 10 %	8" 4 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	NONE	NONE	24V DC / 50mA load max.
10	FIGD-00093	PIJ 542C1-A-D-L-P-X-S	230 V AC $\pm$ 10 %	8" 4 DIGIT	UNIVERSAL	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	NONE	24V DC / 50mA load max.
11	FIGD-00094	PIJ 542C1-A-D-X-P-R-S	230 V AC $\pm$ 10 %	8" 4 DIGIT	UNIVERSAL	NONE	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
12	FIGD-00095	PIJ 542C1-A-D-X-P-X-S	230 V AC $\pm$ 10 %	8" 4 DIGIT	UNIVERSAL	NONE	4 - 20 mA (opto isolated)	NONE	24V DC / 50mA load max.
13	FIGD-00096	PIJ 542C1-A-D-X-X-R-S	230 V AC $\pm$ 10 %	8" 4 DIGIT	UNIVERSAL	NONE	NONE	RS 485 MODBUS SLAVE	24V DC / 50mA load max.
14	FIGD-00097	PIJ 542C1-A-D-X-X-X-S	230 V AC $\pm$ 10 %	8" 4 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)

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