INDUMART Canada
www.indumart.com

Digital Strip Chart Recorder

SERIES: MPR300

- 6 ANALOGUE INPUTS
- UNIVERSAL INPUTS
- SHORT DEPTH OF 15 CM
- 3 DIGITAL INPUTS (OPTION)
- 6 RELAY OUTPUTS (OPTION)
- RS-232 (STANDARD)
- RS-485 MODBUS RTU (OPTION)
- WATER & DUST PROOF (IP65)
- 500 VDC CHANNEL ISOLATION
- SQUARE ROOT CALCULATION
- COMPUTES SUM, DIFFERENCE & AVERAGE
- PRINTS ALARM OCCURRENCE WITH TIME
- PRINTS DATE, TIME, SCALING, CHAR SPEED, PROCESS VARIABLE AND THE ENGINEERING UNIT
- SELF DIAGNOSTIC FUNCTION
- PAPER-EMPTY DETECTION TO TRIGGER AN ALARM (OPTION)
- UL, CSA & CE APPROVED

INTRODUCTION

Indumart MPR300 *series* Digital Strip Chart Recorders are 144 x 144 mm instruments which accept six analogue inputs and may be ordered to also accept 3 digital inputs.

Six alarm relays may be fitted to the recorder as an optional feature. The recorder is equipped an alarm indicator, which lights up when any alarm is triggered.

Chart annotation is a standard feature for MPR300 recorders. It prints time, date, scaling, chart speed, process variable, engineering units and channel tags. It also prints alarm occurrence with the time on the chart to simplify trace interpretation.

The MPR300 recorder is capable of performing math function on the analogue inputs. It may calculate the square root of an input signal, sum up input signals, show the difference between two inputs or compute the average value of the signals.

Isolation is a standard feature, removing all ground loop effects as the inputs are electrically isolated from each other and from the power supply.

The RS-232 communication is standard and can be used for sending data to a PC, etc. The RS-485 communication is an optional feature of the MPR300 recorders, which enables them to have up to 32 connections.

The recorder always makes self diagnostics and when it finds an error, a relevant error message will be display. By referring to the list of errors, the user can find the description of the error message and the recommended remedy for that particular error.

The MPR300 recorder may be equipped with a detection system to notify the operator when a replacement chart is required. This optional feature detects paper-empty situation to output an alarm.

SPECIFICATIONS

Number of Inputs	6 analogue (std), 3 digital (op)
Input Type	Thermocouple, RTD, VDC, mV DC, mA DC with shunt,
Input Range	±10 mV, 0-20 mV, 0-50 mV, ±1 V, 1-5 V, 4-20 mA, TC, Pt100, Pt50
Input Sampling	10s/6ch max.
Input Impedance	>10 MΩ for mV & TC inputs (without burnout); >200 kΩ for mV & TC inputs (with burnout); >1 MΩ for voltage inputs; 250 Ω for mA inputs
Accuracy	±0.2% ± 1 digit max.
Isolation	500 VDC, 20 MΩ between each input and input/ground
Dielectric Strength	Power/input 1.5 kVAC, 1 min; input/ground 500 VAC, 1 min; input/input 200 VAC, 1 minute
Noise Rejection	Common mode: > 140 db Normal mode: > 60 db
Rated Power Supply	100...240 VAC, 50/60 Hz
Working Power Supply	85...264 VAC, 45...60 Hz
Power Consumption	25 VA (normal), 30 VA (max)
Output (option)	6 relays, normally open
Alarm Types	2 types (H, L), 4 levels/channel
Contact Rating	3A @ 250 VAC or 30 VDC
Contact Hysteresis	0.5%
Communication	RS-232C interface (standard) RS-485 Modbus RTU (option)
Front Panel Sealing	IP-65
Operating Environment	0...+50°C; 20...80% RH
Recording	Raster-scan printing
Printing	Dotting with 6-colour ribbon
Chart Paper	16 m long; 100 mm wide
Chart Speed	10...1500 mm/hr; 28 speeds user-selectable
Electromag. Emission	EN55011 group 1 class A
Electromag. Immunity	BS EN 50082-2
Electrical Safety	UL3101-1, IEC1010-1
Case Material	Polycarbonate, 10% glass
Case Window	Polycarbonate (clear)
Dimensions	144x144x150 mm (WxHxD)
Panel Size	144x144 mm
Panel Cutout	138x138 mm
Weight	<1.5 kg

ORDER CODES

Model **MPR300** – [ ] [ ] [ ]

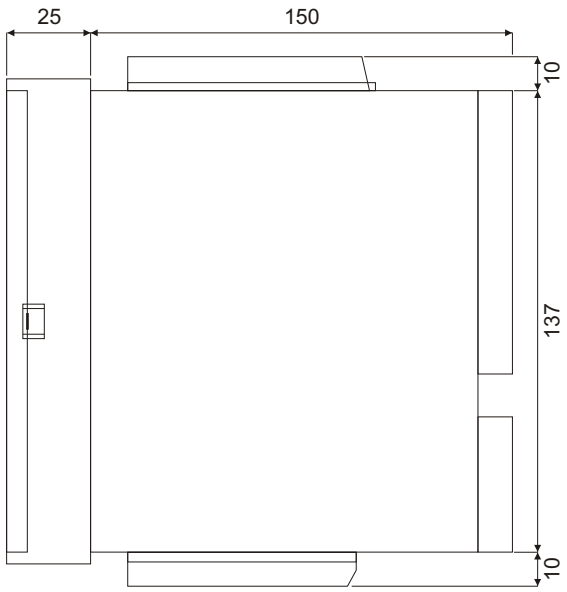
COMMUNICATION
RS-232C (standard) 0
RS-485 (option) 1

DIGITAL INPUT/OUTPUT
None 0
6 Relay Outputs 1
3 Digital Inputs 2
3 Digital Inputs + 6 Relay Outputs 3

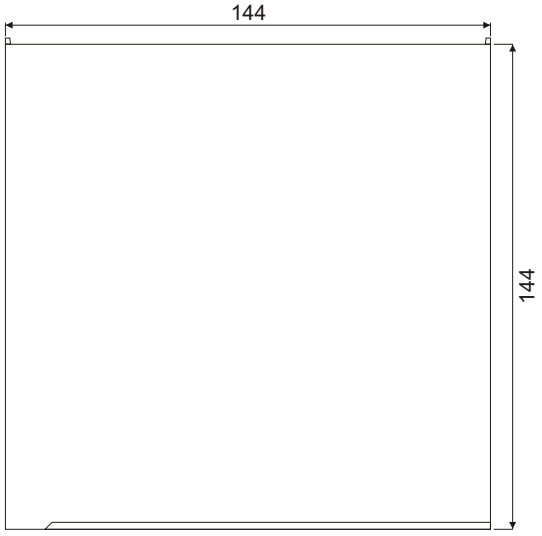
OUT-OF-PAPER SENSOR
Not Required 0
Required (option) 1

DIMENSIONS (mm)

Side View



Front View



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