



SUNTRONICS INDUSTRIAL INSTRUMENTS PVT LTD

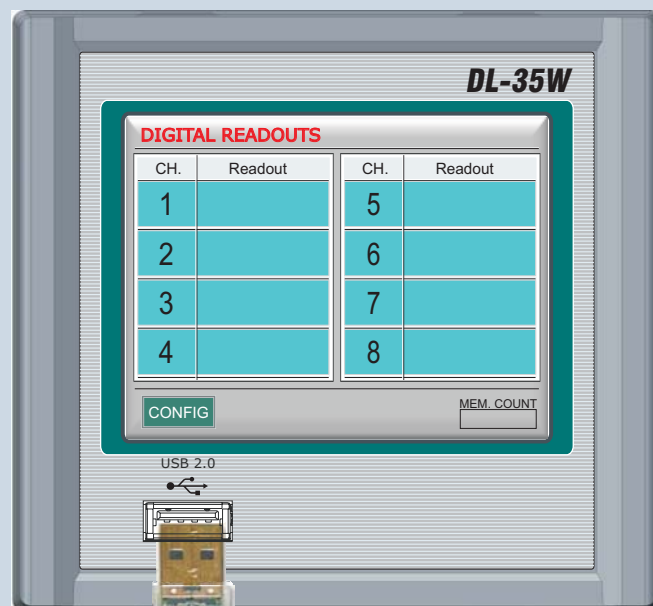
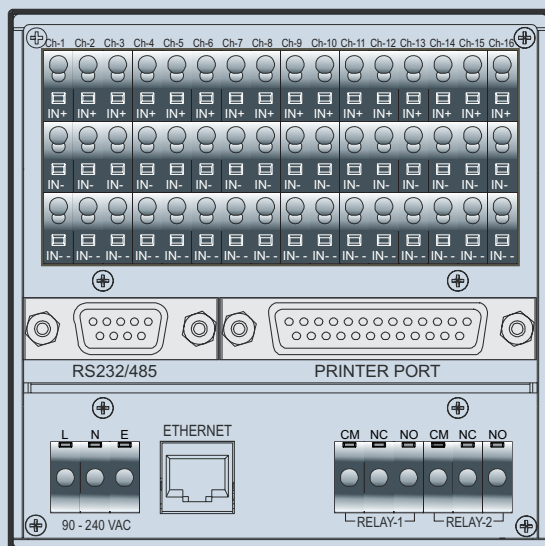
DL 35 PAPERLESS DATALOGGER DATA SHEET

Features

Benefits

- 8 or 16 universal input (RTD, Thermocouple, 0-5Vdc, 0-20mA or 4-20 mA input signals.)
- Onboard 32000 reading per channel storage .
- Parallel Port
- Individual HI / LO alarm with 2 relay outputs
- Additional relay outputs with optional Relay card
- Networkable using Ethernet Port (optional)
- Free PC Based Data Acquisition software
- 21 CFR Part 11 (optional)
- Front end IP65 protection
- 3.5 inch TFT with Touch Screen Control
- Onboard USB Port (Memory stick)

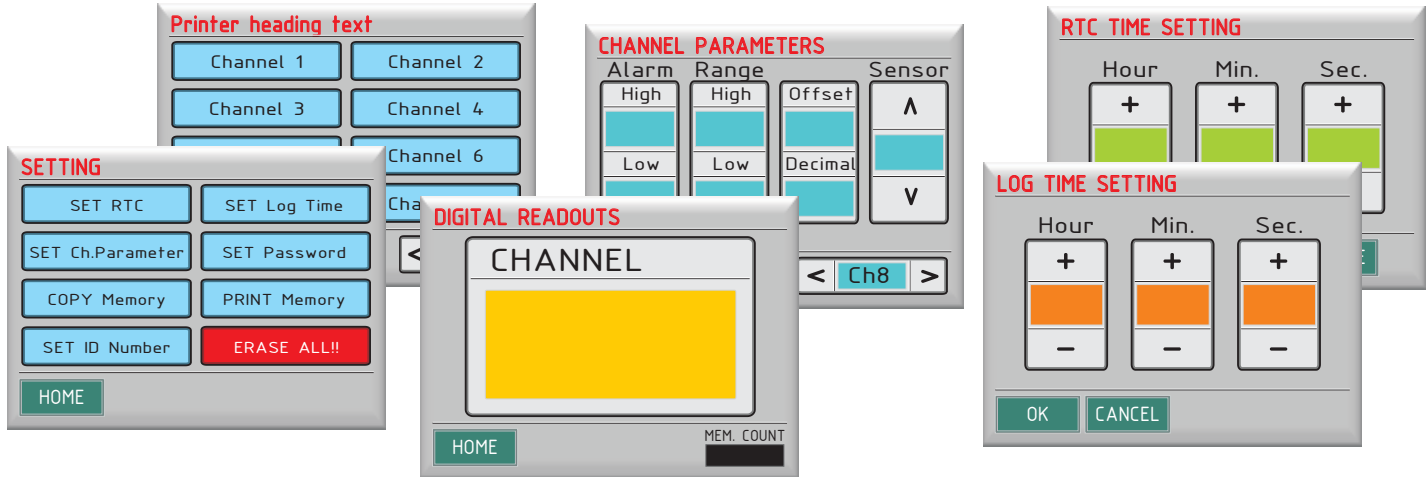
- Easy to configure analog input type with front end TFT touchscreen.
- Logged data is secured as storage media is inside the unit.
- Helps to connect any type of dot matrix printer.
- Relay output for control or activating external alarms.
- Individual Alarm relay (HI / LO) can be provided for all 16 channels.
- Data accessible via LAN.
- Not necessary to pay extra cost.
- Logged data is secured and can not be manipulated by user.
- Panel mounting enclosure which can sustain in harsh environment.
- Easy to use icon menu for setting user parameters with touch interface.
- Logged data can be downloaded to Memory stick and transfer to PC.



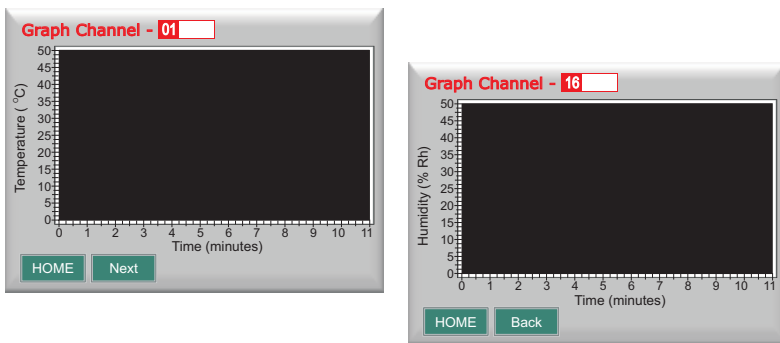
USB Memory Stick

User Interface and control

The DL-35 utilizes a high contrast 3.5-inch color Active Matrix TFT LCD display with a rugged touch screen. Use a finger or the board stylus, if you prefer to perform data entry and System navigation. The front panel is also fully compliant to IP65 for use in dusty or wet areas. An intuitive icon driven menu system guides the user through easy to follow setup and control screens. The multiple Display screens containing various combinations of indicator types such as horizontal and vertical bar graphs, large and small digital indicators and horizontal trends makes setting up the parameters extremely simple.



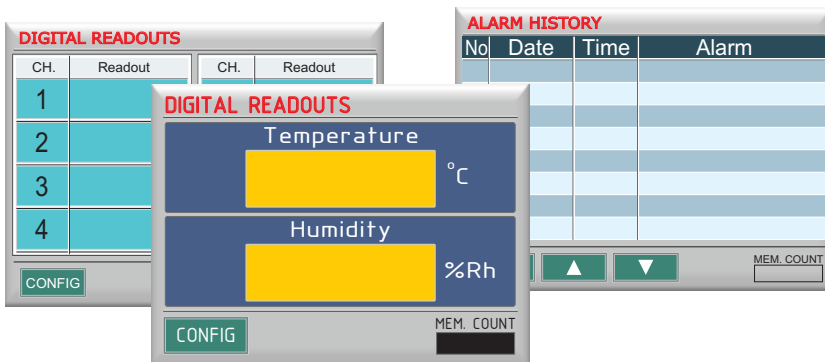
Graphical view



The composite graphical view can display a online graph for a single input channel at a time. Individual channels can be displayed for detailed analysis. The channel data is stored in memory with its time and date.

With external PC software the user is able to manipulate the graph to make it easy to see interaction between recorded channels, or change the Color schemes, expand, compress, zoom and print. The same analysis tool used for multi-channel graph and used to scroll through data.

Tabular view



The Digital Readout Display displays online data for multiple channels. Single channel data can be viewed with bigger Digit size. The digit color channel changes when the alarming condition occurs. The alarms events can be viewed with date and time stamp in Alarm History screen. Display also shows the memory count which shows the status how more data samples can be stored in memory.

Recording data on storage media

Using the Setup menu, the user can log the data in internal memory. If this memory is full the logged data can be transferred to external storage media connected on USB Port.

Record rate	8 channel	16 channel
1 Sec	9 Hrs	4.5 Hrs
10 Sec	90Hrs	45 Hrs
1 min	540 Hrs	270 Hrs
10 min	5400 Hrs	2700 Hrs

The above table shows the number of maximum readings can be stored internal memory by changing record time After the above prescribed time the data must be transferred to USB storage media so as internal memory get free to store the new readings .

General

Input Resolution: 0.1% of full scale.
 Input Channels: 8 or 16 channel direct universal input.
 Measurement Rate: 4 channels per second on all direct input channels
 Internal Temperature Reference : 0 to 60 °C

Analog Inputs

DC Voltage: 0-5 Vdc with accuracy 0.1%.

DC Current: 4-20mA, 0-20mA.
 Accuracy: +/-0.1% with built in shunt.

Thermocouple
 Resolution: 1°C.
 Reference junction compensation : Yes.

Type	Range (°C)	Accuracy (°C)
J	-210 to -100°C	+/-2.5 °C
	-100 to 1200 °C	+/- 1.5 °C
K	-270 to -100 °C	+/- 2.5 °C
	-100 to 1372 °C	+/- 1.5 °C
T	-270 to -100 °C	+/- 2.5 °C
	-100 to 400 °C	+/- 1.5 °C
E	-270 to -100 °C	+/- 2.5 °C
	-100 to 1000 °C	+/- 1.5 °C
N	-270 to -100 °C	+/- 2.5 °C
	-100 to 1300 °C	+/- 1.5 °C
S	-50 to 1768 °C	+/- 3 °C
B	0 to 1820 °C	+/- 4 °C

RTD
 Base Accuracy: 0.2% or 0.5 °C (1 °F).Resolution: 0.1 °C
 2 or 3 wire connection. Cable compensation to +50 ohm.
 Open and short circuit detection.

Type	Range °C
100 ohm Plt. 385	-220 to 85 °C

Recording

Recording Rates: User programmable from 1 sample per second to 1 sample every 10 hours
 Data Format: .Txt file; can be easily openable by variety of softwares.
 Data Storage Capacity:512 kb internal memory and this data can be Easily moved to memory stick connected to USB Port.
 Data Scaling and statistics : By PC Software.

Display

Type: Color Active Matrix TFT Liquid Crystal Display
 Size: 3.5 inch diagonal,Resolution: 320 (W) x 240 (H) pixels
 Interface: Resistive analog touch screen control
 Display Modes: Graphic trending (horizontal), Bar Graphs(Vertical)
 Digital Readout (Single or multi-channel), Alarms and event log settable.
 Historical trends : In PC Software.
 Display Windows: Time/Date, Graphics (bars, large digital, graph) Disk Status, System Status, Menu Button Bar, Alarms/ events.

Communications

Network: 10/100 Base T Ethernet standard (Optional).
 Modbus over Ethernet server
 Serial: Isolated RS485/RS232 for PC Interface.
 Parallel Port : Isolated Dot Matrix Printer port Interface.
 USB Port : Isolated USB 2.0 host for connecting Memory stick, USB hard disk.

Power

Requirements: 100 to 240 Vac, 50/60Hz. 20 VA max.
 Power Fail Protection: Programmed parameters stored in non-volatile memory. Clock battery backed. Clock battery to be replaced once in 5 Years , one 3V Lithium cell easily replacable.
 Transmitter Power supply Output: Optional isolated 24Vdc@120mA output

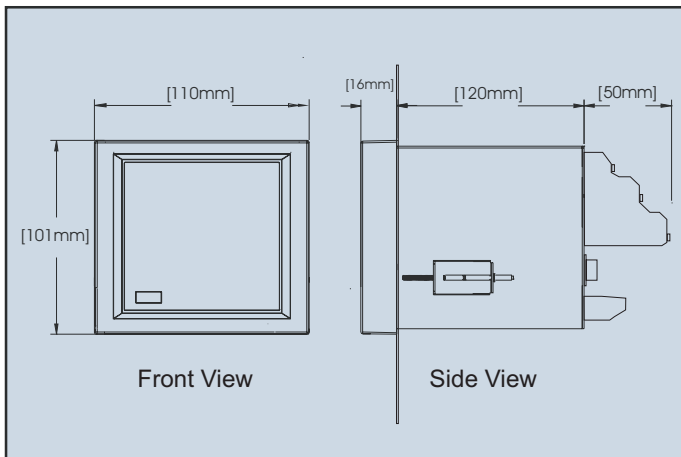
Input/Output

Relay Output : 2 relay outputs, (normally open, Close & pole contacts) rated at 30 Vdc @ 0.5A or 230Vac @ 5Amp Max.
 Additional relay outputs (optional) : 12 Relay card; separate DIN rail Mounting Card interfaced with RS-232 interface with this unit.

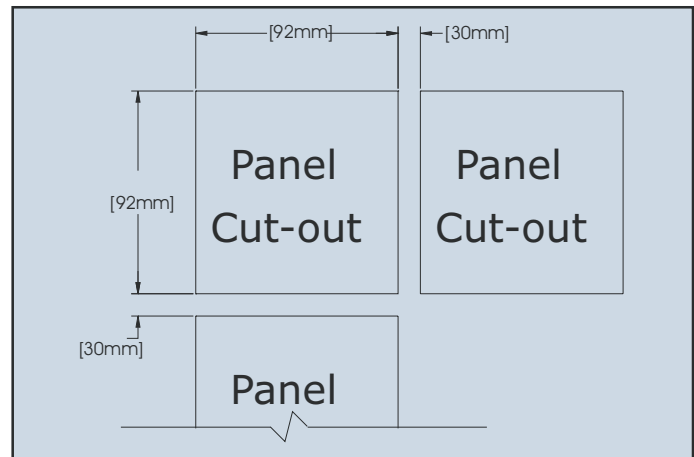
Safety and Environmental

Operating Range: 0 °C to 50 °C, 10% to 80% RH non-condensing
 Dimension: Bezel dimension -110(W) x 101(H) x 16mm above panel.
 Unit dimension - 110 x 101 x 150 mm depth.
 Panel Cutout - 92 x 92 mm
 Protection: IP65 for front bezel when mounted in panel.
 Safety: Meets the requirements of EN61010-1 when installed in accordance with the instructions in the manual.
 UL and cUL: Pending
 EMC: Meets the requirements of En61326 and CE directive 89/336/EEC.
 Weight: Approximately 1.5 kg.

Dimensions



Panel Cutout



SUNTRONICS INDUSTRIAL INSTRUMENTS PVT. LTD. SHOP NO 31, PRAGATI INDUSTRIAL COMPLEX, BEHIND KARISHMA SOCIETY, KOTHRUD PUNE :- 411038 , MAHARASHTRA , INDIA Phone No. : +91 9422003496 / +91 9579156178 E-mail : info@siipl.co Website : www.siipl.co