NI-DL-35W

Product features

Paperless Data Acquisition System

Controls & Equipments has been a pioneer in the development of paperless data acquisition systems for over 15 years. The utilization of state of the art technologies to develop intelligent, powerful and intuitive products has made NI-DL-35W a product line competitive to global leader in paperless recording technology.

The NI-DL-35W is the most advanced paperless recording system available. It incorporates the latest in measurement, communication, interface and processing technologies to deliver unmatched performance for your data acquisition application.

The NI-DL-35W is like no other paperless recorder available. We listened carefully to our product users and developed a device with the unique features they demanded.

Key features

- 8 or 16 universal input (RTD, Thermocouple 0-5Vdc, 0-20mA or 4-20 mA input signals.)
- Onboard 25000 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 protections
- 3.5 inch TFT with Touch Screen Control
- Onboard USB Port

Benefits:

- 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 cannot 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

Nascon Instruments

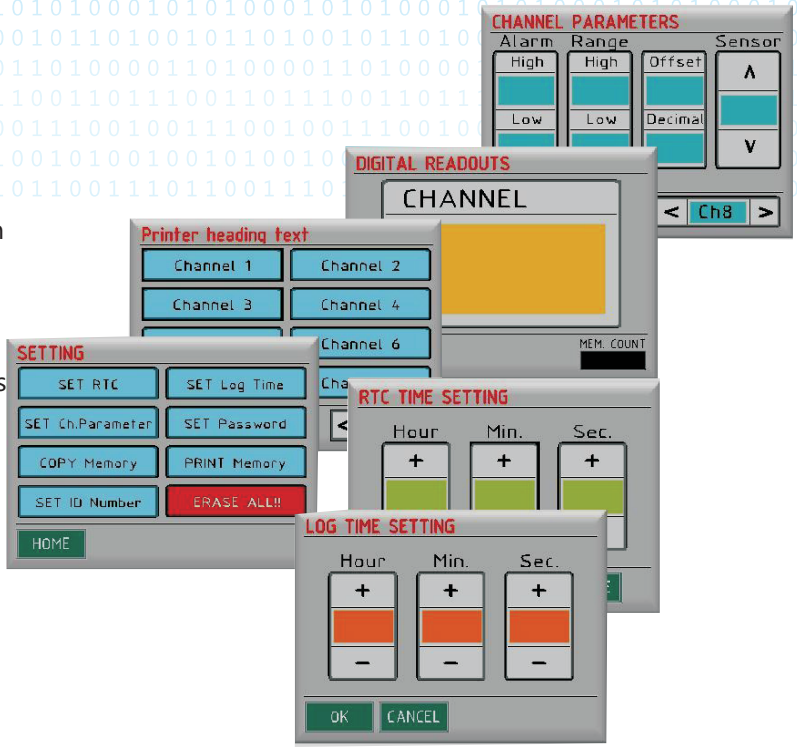
Ph: +91 9246366871
+91 9652259196

7-2-202, IInd Floor Ghansmandi Road, Secunderabad-500003, Telangana, India
Email: nasconin@gmail.com, nasconin@yahoo.com URL: www.nasconinstruments.com

NI-DL-35W

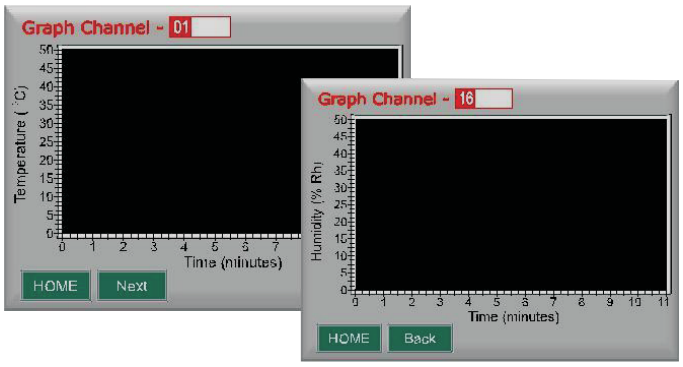
User Interface and control

The NI-DL-35W 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.



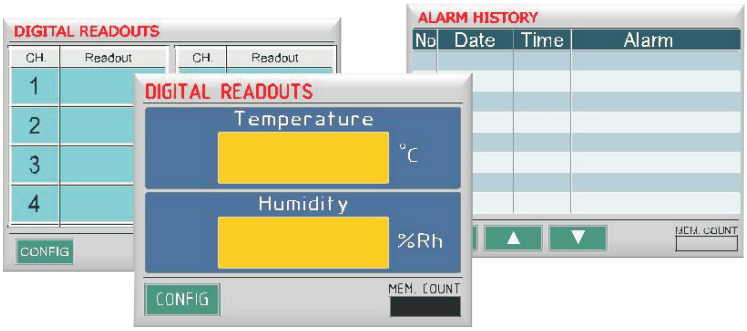
Graphic View (Available in 32 Channel and above)

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. The 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.

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

Nascon Instruments

Ph: +91 9246366871
+91 9652259196

7-2-202, IInd Floor Ghansmandi Road, Secunderabad-500003, Telangana, India
Email: nasconin@gmail.com, nasconin@yahoo.com URL: www.nasconinstruments.com

NI-DL-35W

Specifications

General

Input Resolution:	0.1% of full scale.
Input Channels:	8 or 16 channel direct universal i nput.
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 software
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 multichannel), Alarms & event log settable. Historical
Trends:	In PC Software.
Display Windows:	Time/Date, Graphics (bars, large digital, and 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

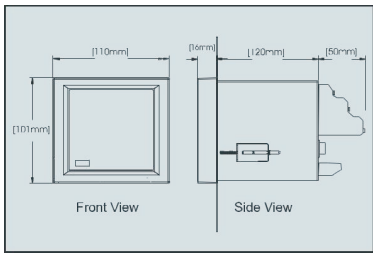
Network:	10/100 Base T Ethernet standard (Optional). Modbus over Ethernet server
Serial:	Isolated RS485/RS232 for PC Interface.
Parallel Port:	Isolated Dot Matrix Printer port Interface.
USB Port:	Isolated USB 2.0 host for connecting Memory stick, USB hard disk.

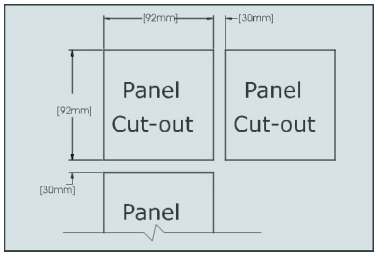
Input/output

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 noncondensing
Dimension:	Unit dimension - 110 x 101 x 150 mm depth. Bezel dimension -110(W) x101(H) x16mm above panel 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





Nascon Instruments

Ph: +91 9246366871
+91 9652259196

7-2-202, IInd Floor Ghansmandi Road, Secunderabad-500003, Telangana, India
Email: nasconin@gmail.com, nasconin@yahoo.com URL: www.nasconinstruments.com