

I/A SERIES® MICRONET LCD DISPLAY

Order Types:
 MN-LCD-100 - MicroNet LCD Display
 MN-LCDP-100 - MicroNet LCD Display (Panel Mounting)

The I/A Series MicroNet LCD Display is a text menu driven LCD display that allows a user to monitor and configure parameters of an MN 500 or an MN 620 controller. The display is fully programmable using the VisiSat Configuration Tool.

The LCD display can be used to interrogate and alter temperature inputs, plant conditions, plant overrides, time and holiday schedules that reside on the MN 500 or 620 controllers. Up to 246 lines of data can be displayed.

The MN-LCDP-100 can be mounted in a self-contained panel and connected to a controller. The MN-LCD-100 and MN-LCDP-100 models can be mounted on a wall mounting unit, remotely from the controller. These models can also be mounted on an MN 500 or an MN 620 controller to provide stand-alone operation.

When the MN LCD display is mounted remotely, the MN 500 or MN 620 controller can be connected to the LONWORKS® FTT-10, NCP or ARCNET® network. The MN LCD display features a built-in Real Time Clock powered separately by a Lithium battery to provide complete stand-alone operation.

The MN LCD can be used in the LONWORKS network to show and alter parameters from other LONWORKS devices (such as MN controllers or third party devices) by binding Standard Network Variable types (SNVTs) to the base controller. The MN LCD can also act as a time master for LON® networks and can be used to change time scheduling information on the base controller.

FEATURES

- Clear, high contrast LCD Display
- Wall Mounting and Panel mounting versions available
- Intuitive, text based menu system
- Fully programmable with VisiSat Configuration Tool
- Semi-automatic upload of the configuration from the controller - 'Plug and Play'
- Built-in Real Time Clock with battery back-up
- Time master capability for LONWORKS networks
- Can be used as a local user interface for any LonWorks devices via the base controller
- Can be connected directly on a MN 500 or MN 620 controller for stand-alone operation
- When remotely mounted, the MN 500 or 620 controller can be operated in LONWORKS, ARCNET or NCP network modes, using plug-in communications cards
- Screen configuration is saved on EEPROM, providing parameter protection from power cuts



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ARCNET is registered trademark of Datapoint Corporation.

LON and LONWORKS are registered trademarks of Echelon Corporation.

All other brand names may be trademarks of their respective owners.



Data Sheets

DS 10.060A - Wiring and Commissioning Information

DS 10.103 - MN 500 Controllers

DS 10.104 - MN 620 Controllers

DS 10.201 - MicroNet View Software

DS 10.202 - VisiSat Configuration Tool

DS 10.210 - MicroNet Manager Interface

Multi-Lingual Instructions

MLI 10.060 - Installation Instructions

SPECIFICATION

Order Type	Description	Communications Protocol	Direct Controller Mounting
MN-LCD-100	MicroNet LCD Display (Controller or Wall Mounting)	Point-to-Point NCP	Yes (Stand-alone)
MN-LCDP-100	MicroNet LCD Display (Panel Mounting)	Point-to-Point NCP	No

HARDWARE SPECIFICATIONS

Dimensions:	244mm width x 108mm height x approx. 43mm depth
Enclosure:	Moulded polycarbonate plastic case. Fire resistant to UL94 VO. Wall or Panel Mounted IP 20
Communications Ports:	1 Serial RS 485 port.
Power Supply Input:	24Vac, powered from the host unit (either MNN-50-100 or MNN-62-100 series controller) or by direct 24Vac wiring. Lithium battery, 350 days life at continuous discharge.
EMC Compliance:	EN55022 (Emissions) (Class A) EN50082-1 (Immunity)
Compliance:	FCC Class A and CE Compliant
Wiring Terminals:	Eight (8) Plug-in Screw Terminals (Panel Mounting) Accepts max. conductor size Ø1mm (18 AWG)
Mounting:	Direct to controller, panel-mounted or wall mounted using MN-DK.
Ambient Limits:	Operating Temperature: 0 to 50°C Shipping and Storage Temperature: -40 to 70°C Humidity: 0 to 95%rh, non-condensing.

SOFTWARE SPECIFICATIONS

The MicroNet LCD display shows and allows configuration of controller parameters. The table below lists some of these parameters and details their use.

MicroNet LCD Display Menu Options

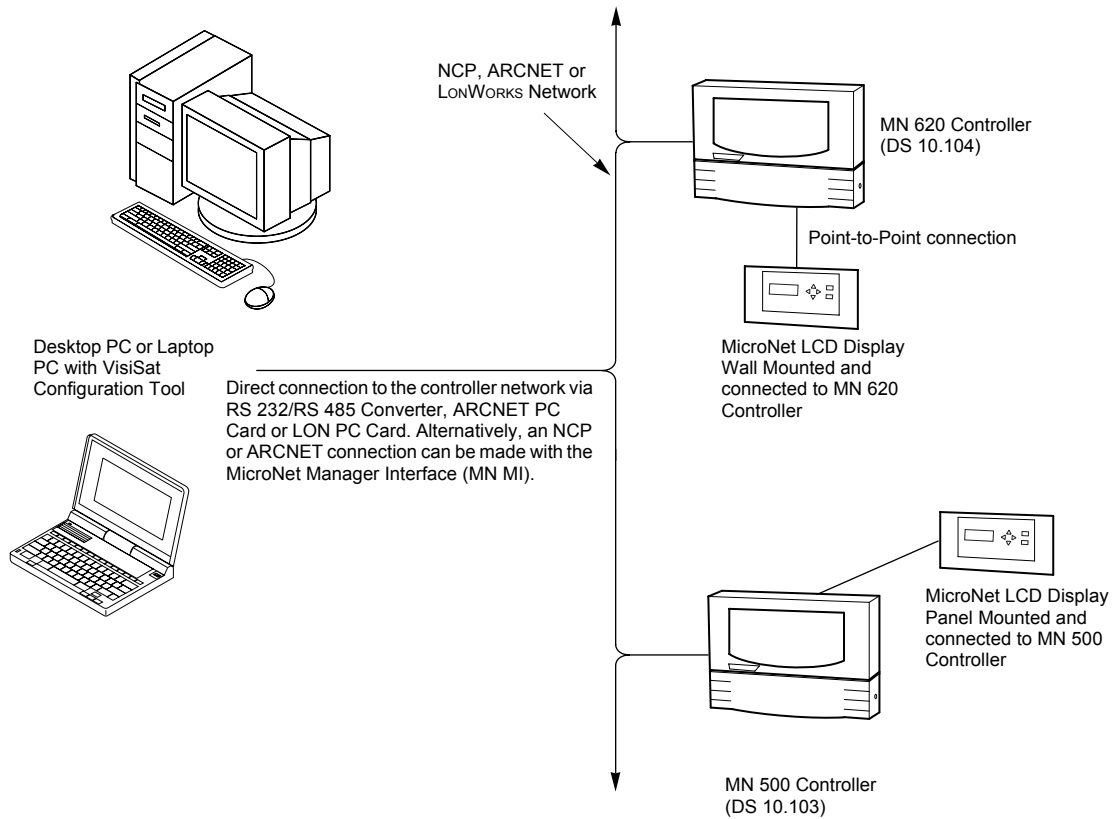
Menu Option	Details
Default Screen	The default screen can be programmed to display time and plant operating condition.
Change an Analogue Value	User can increase or decrease the parameter values within a specified range.
Change Digital Parameters	User can choose ON or OFF.
Change/Set a Time Schedule	Date, hour, and minutes are selectable by the user.
Change/Set a Holiday Schedule	Start/end holiday, date is selectable by the user.

ACCESSORIES

MNN-COM	NCP Plug-in card required for installation in MN 500 or MN 620, when connecting controller to NCP network.
MN-DK	Display Wall Mounting Kit for LCD display, available for MN-LCD
MNN-50-100	MicroNet MN 500 NCP Controller
MNN-62-100	MicroNet MN 620 NCP Controller
MNA-C	ARCNET Plug-in card for MNN-50-100 or MNN-62-100
MNL-C	LONWORKS Plug-in card for MNN-50-100 or MNN-62-100

TYPICAL SYSTEM DIAGRAM

I/A SERIES MICRONET LCD DISPLAY



COMMUNICATIONS

Point-to-Point Protocol The MN LCD display communicates to the MN 500 or MN 620 controller using a point-to-point protocol. The communication speed is 9600 baud. The point-to-point protocol allows the display to be connected remotely from the controller, up to maximum of 10m.

The display automatically uploads its configuration from a MN 500 or MN 620 controller once the connection is established. If the LCD configuration is modified on the controller, it is automatically updated.

If the LCD is installed on an NCP network, a communications card must be installed within the relevant controller to enable the controller to communicate on the NCP network.

LONWORKS and ARCNET Networks The MN LCD can access parameters from LON and ARCNET networks by binding the parameters to the MN 500 or MN 620 controllers.

APPLICATIONS

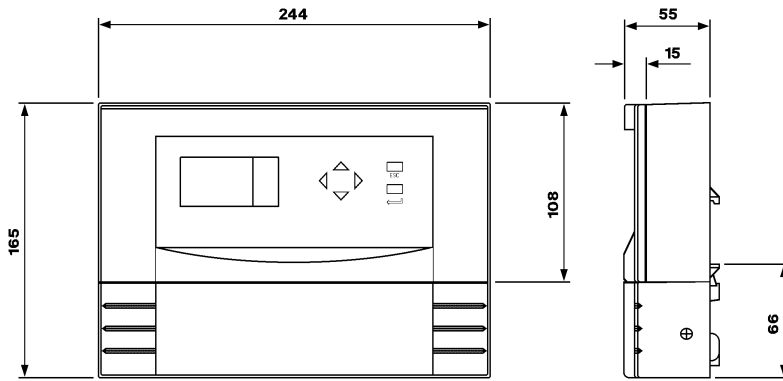
The LCD Display provides the following functionality to a MN 500 or MN 620 controller:

- Time Scheduling
- Holiday Scheduling
- Temperature and Control Output Monitoring
- Setpoint Monitoring
- Plant status Monitoring

CONNECTIVITY

The LCD Display is connected to a MN 500 or MN 620 controller. The display configuration is downloaded via the MN MI to the MN 500 or MN 620 controller, from where it is automatically uploaded to the display.

DIMENSION DIAGRAM



Dimensions in mm

Weight:
MN LCD 650.3g

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WARNING -

THE RTC BOARD CONTAINS A LITHIUM CHLORIDE BATTERY WHICH IS COMPLETELY SAFE WHILST IN NORMAL USE. THE BATTERY MUST BE DISPOSED OF IN AN AUTHORISED LANDFILL SITE.

Cautions

- Do not apply any voltages until a qualified technician has checked the system and the commissioning procedures have been completed.
- This is a 24Vac device. Do not exceed rated voltage. Local wiring regulations and usual safety precautions apply.
- 24Vac must be supplied by a transformer conforming to EN 60742.
- If any equipment covers have to be removed during the installation of this equipment, ensure that they are refitted after installation to comply with UL and CE safety requirements.
- Do not exceed the maximum ambient temperature.
- Interference with parts under sealed covers invalidates guarantee.
- The design and performance of Invensys equipment is subject to improvement and therefore liable to alteration without notice.
- Information is given for guidance only and Invensys does not accept responsibility for the selection or installation of its products unless information is given by the Company in writing relating to a specific application.
- A periodic system and tuning check of the control system is recommended. Please contact your local Invensys service office for details.