

Powerful and Compact Alphanumeric Operator Interface

- High visibility LED backlit LCD display shows 2 lines of 16 characters
- Choose programmable or message display models
- Compact, fits 1/8 DIN panel cutout
- Six programmable function keys
- Two programmable LED indicators
- Powered by peripheral port or 24 VDC power supply
- Password protect any function key
- Bar graph display
- cCSAus and CE approvals
- IP65 protection rating
- Programming software included at no cost



Ordering Information

Item	Part number
2 x 16 character LCD text, 6 function key, RTC, 24 VDC	NT2S-SF121B-E
2 x 16 character LCD text, 6 function key, 5 VDC	NT2S-SF122B-E
2 x 16 character LCD text message display, 6 function key, 5 VDC	NT2S-SF123B-E
9-pin to peripheral port cable, 2 m for SF121 model	NT2S-CN212
9-pin to peripheral port cable, 5 m for SF121 model	NT2S-CN215
9-pin to peripheral port cable, 2 m for SF122 and SF123 models	NT2S-CN222
9-pin to peripheral port cable, 5 m for SF122 and SF123 models	NT2S-CN225

Specifications

■ FEATURES

Features	Description	NT2S-SF121B-E	NT2S-SF122B-E	NT2S-SF123B-E
Programming package	Windows® Software Package - NT2ST	Yes	Yes	Not programmable
ASCII controlled messages	ASCII in PLC registers is displayed on the NT2S screen. Pointer in PLC memory tells NT2S which register to display. Pointers placed in that PLC register point to data value to be displayed.	No	No	Yes
Multi-vendor support	Omron, Allen-Bradley Micrologix and SLC 5/0x, GE Micro, Modicon, Keyence KV Series, Toshiba T Series, Koyo 305, 405, and DL205 Series	Yes	No	No
Memory	Type EEPROM	8 K	8 K	8 K
Power	24 VDC terminals or PLC peripheral port 5 VDC	24 VDC	5 VDC	5 VDC
Enclosure ratings	IP65	Yes	Yes	Yes
Standards	CE, cCSAus	Yes	Yes	Yes
Ambient operating rating	0 to 50°C	Yes	Yes	Yes
Storage temperature	-20°C to 60°C	Yes	Yes	Yes
Ambient operating humidity	35% to 85% with no condensation	Yes	Yes	Yes
Ambient operating environment	No corrosive gases	Yes	Yes	Yes
Weight	400 g	Yes	Yes	Yes
Panel fitting	2 clamps	Yes	Yes	Yes
Face dimensions mm (inch)	Dimensions of NT2S front bezel	109W x 60H (4.29 x 2.36)	109W x 60H (4.29 x 2.36)	109W x 60H (4.29 x 2.36)
Rear unit dimensions mm (inch)	Dimensions of portion of NT2S that enters panel	91W x 44H x 44D (3.58 x 1.73 x 1.73)	91W x 44H x 44D (3.58 x 1.73 x 1.73)	91W x 44H x 28D (3.58 x 1.73 x 1.10)
Panel cutout mm (inch)	Recommended panel cutout dimensions: 1/8 DIN	92W x 45H (3.62 x 1.77)	92W x 45H (3.62 x 1.77)	92W x 45H (3.62 x 1.77)

■ DISPLAY

Features	Description	NT2S-SF121B-E	NT2S-SF122B-E	NT2S-SF123B-E
Display	Lines * characters	2 * 16	2 * 16	2 * 16
Character height	mm (inch)	4.35 (0.17)	4.35 (0.17)	4.35 (0.17)
Backlit	LED backlight	Yes	Yes	Yes
Effective display area	mm (inch)	60 x 13 (2.36 x 0.51)	60 x 13 (2.36 x 0.51)	60 x 13 (2.36 x 0.51)
Indicators	Red and green LED indicators	Yes	Yes	Yes
Number of screens	Max. number of screens if only text messages are used. Adding function keys, scrolling messages, etc. decreases the maximum number of screens.	250	250	NA
Data format	HEX, BCD, OCT, BIN, signed, unsigned	Yes	Yes	Controlled by PLC

■ FUNCTION KEYS

Features	Description	NT2S-SF121B-E	NT2S-SF122B-E	NT2S-SF123B-E
Available function keys	Number of user programmable function keys	6	6	6 fixed function
Global function key program	Function key can be programmed for global functions. Key program is effective throughout the NT2S program.	Yes	Yes	NA
Local function key program	Function key can be programmed uniquely for each screen.	Yes	Yes	NA
Function key binary action	Momentary, toggle on, toggle off, set on, set off	Yes	Yes	NA
Function key numeric action	Set constant value, increment, or decrement by a constant value to PLC register.	Yes	Yes	NA
Numeric entry	Special screen uses arrow, clear, and enter keys to input numeric values to PLC register.	Yes	Yes	Yes
Function key screen	Global function key actions can be linked to a function key screen that displays upon activation of that function key. This can be used to confirm function key.	Yes	Yes	NA
Password protect any key	Password can be activated for any function key.	Yes	Yes	NA

■ COMMUNICATIONS

Features	Description	NT2S-SF121B-E	NT2S-SF122B-E	NT2S-SF123B-E
COM port 1	Programming & Printing port	DB9 connector RS-232 Port	DB9 connector RS-232 Port	NA
COM port 2	Host PLC communications	DB9 connector CMOS/ RS-232 port	DB9 connector CMOS port	DB9 connector CMOS port

■ SPECIAL FUNCTIONS

Features	Description	NT2S-SF121B-E	NT2S-SF122B-E	NT2S-SF123B-E
Real time clock	2-digit year, month, date, hour, minute, second	Yes	NA	NA
2 user definable LEDs	Red and green LED can be controlled from PLC	Yes	Yes	Yes
Scrolling messages	Scroll messages up to 256 characters	Yes	Yes	NA
Flashing display	Specify for backlight to flash	Yes	Yes	NA
Minimum display time	Define minimum display time for a screen	Yes	Yes	NA
Screen chaining	Chained screens will display in sequential fashion, each displaying for the set minimum display time.	Yes	Yes	NA
Link screen	Create a list of screens that can be navigated using the NEXT (F1) and PREVIOUS (F2) keys.	Yes	Yes	NA
Bar graph display	Display numeric values as a bar graph	Yes	Yes	Yes

■ PRINT FUNCTIONS

Features	Description	NT2S-SF121B-E	NT2S-SF122B-E	NT2S-SF123B-E
Print screen	Configure serial communications port to communicate with a printer. Print screen text and displayed PLC data values can be printed.	Yes	Yes	No

Operations

■ NT2S-SF121B-E

Key Features

- Unit programmed with Windows®-based software included with each unit at no charge
- 24 VDC from external power supply
- Real time clock — year, month, date, hour, minute and second sent to specified PLC registers
- Supports Omron PLCs
- Supported multi-vendor PLCs
 - Omron Host Link
 - Allen-Bradley Micrologix and SLC 5/0X (DF1)
 - GE Micro
 - Modicon (Modbus Master)
 - Keyence KV Series
 - Toshiba T Series
 - Koyo 305, 405 and DL205 Series

■ NT2S-SF122B-E

Key Features

- Unit programmed with Windows®-based software included with each unit at no charge
- 5 VDC power supplied by PLC peripheral port
- For use with Omron PLCs

■ NT2S-SF123B-E

Key Features

This is not a typical message display. The NT2S-SF123B-E is a message display with function keys that provide data entry and screen changing capability. The unit displays ASCII characters that are stored in PLC registers. The displayed data register is controlled by a command register which specifies the register number to be viewed. PLC registers can be programmed to display text or numeric values from other PLC memory locations using pointers. Numeric values displayed on screen can be modified by entering the DATA mode and using the up and down arrow function keys.

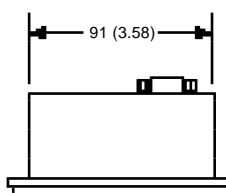
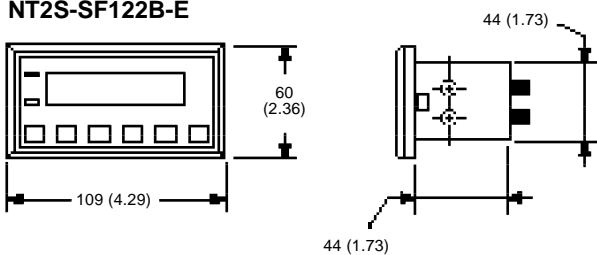
- 5 VDC power supplied by PLC peripheral port
- Supports all Omron PLCs
- Preset function keys allow navigation through PLC registers, selection of data for modifications and entry of new values

Dimensions

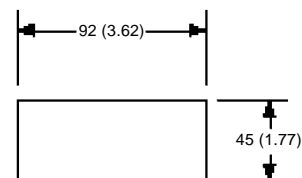
Unit: mm (inch)

■ OPERATOR INTERFACES

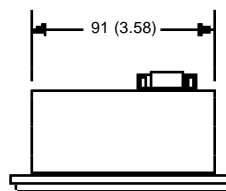
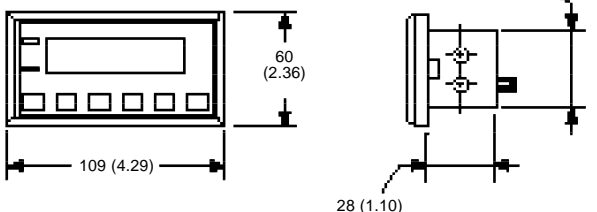
NT2S-SF121B-E
NT2S-SF122B-E



Panel cutout 1/8 DIN



NT2S-SF123B-E



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