OMRON

Introduction to OMRON HMI

HMIs for essentially any purpose

	NS12	NS10	NS8	NS5-T	NS5-S / NSH5-S	NS5-M
Model	NS12	NS10	NS8	NS5-T	NS5-S / NSH5-S	NS5-M
Type of display	TFT 12 inch colour display	TFT 10 inch colour display	TFT 8 inch colour display	TFT 5.7 inch colour display	STN 5.7 inch colour display	STN 5.7 inch mono-chrome display
Size in mm (HxWxD mm)	241x215x48.5		177x232x48.5	142x195x54 NSH5 176x223x70.5 (depth excl. emergency button)		
Effective display area	246x184.5 mm (800 x 600 pixels)	215.2x162.4 mm (640 x 480 pixels)	170.9x128.2 (640 x 480 pixels)	117.2x88.4 mm (320 x 240 pixels)		
Display colour	256 colours Image data: 32,768 colours				256 colours Image data: 4,096 colours	16 grey scales
Power supply	24 V DC ±15%					
Touch panel	38 vertical x 50 horizontal	30 vertical x 40 horizontal	24 vertical x 32 horizontal	15 vertical x 20 horizontal		
Obtained standards	UL 1604 C1D2, cUL, EC Directives, NEMA equivalent					
Display graphics	Rectangle, circle, oval, straight line, polyline, polygon, arc					
No. of display characters (standard characters)	100 characters x 37 lines	80 characters x 30 lines				
No. of registered screens	3,999 screens max. (depending on screen contents)					
Screen data capacity (standard)	60 MB			20 MB		
Memory card interface	ATA compact flash card interface, 1 slot					
Internal memory	Bit memory: 32,767 bits, Word memory: 32,767 words, Retentative memory: 8,192 bits and 8,192 words.					
Printer connection	Supported			---	---	
Backlight life	50,000 hours minimum		40,000 hours minimum	75,000 hours minimum		50,000 hours minimum
Multivendor support	Supported for most third-party PLCs. Please contact your local OMRON distributor for more information.					
Video board (composite / RGB)	Supported			---	---	

	NSJ5
Model	NSJ5
Features	A combination of a fast and powerful CJ1 PLC, a 5.7" NS series touchscreen and open network connections. With the NSJ5 you are able to configure, commission, operate and maintain your complete automation solution. Ideal for applications that require visualisation, control and open network connection with little space. Panelless automation by making use of remote I/O terminals and intelligent devices. - 5.7" colour touchscreen, 4096 colours (images), 20 MB screen data memory - 20 k Steps PLC program memory - 32 K Words PLC data memory - DeviceNet or CAN interface - Ethernet interface - Compact Flash card interface

Human Machine Interfaces

Select the HMI that suits your application best

Model	NT21S-ST121(B)[1]	NT11–SF121(B)[1]	NT2S-SF12☐B-E(V2)	NT3S-ST12☐B-E
Size in mm (HxWxD)	110x190x58	113x218x38.2	60x108x43	77x140x35
Effective display area	117x63 mm (260x140 dots)	160x64 mm	56x11 mm	98x35 mm (192 x 64 pixels, 4.1 inch)
Type with ethernet	24 VDC +10%/-15%	24 VDC ±15%	24 VDC ±10% (when applicable)	24 VDC ±15%
I/O Function keys	-	22 keys	6 to 20 keys depending on model	-
Touch panel	7 vertical x 13 horizontal	---	---	Analog Resistive
Obtained standards	UL, CSA, EC Directives,NEMA equivalent	CE, cULus	CE, cULus	CE, cULus
Display graphics	Straight lines, rectangles, polygons, circles, ovals, sector, bitmaps			Rectangle, rounded rectangle, circle, oval, line, bitmaps
No. of display characters (standard characters)	16 characters x 8 lines	20 characters x 4 lines	16 characters x 2 lines	32 characters x 8 lines
No. of registered screens	3,999 screens max. (depending on screen contents)	250	250	65,000 max. (limited by memory capacity)
Screen data capacity (standard)	512 KB	32 KB	24 KB	120 KB
Expansion memory	---	---	---	---
Memory card interface	NT-MF261 memory unit for screen transfer can be used.	---	---	---
Expansion interface	---	---	---	---
Ethernet	---	---	---	---
Internal memory	Numeral memory table: 2,000 entries max., Character memory table: 2,000 entries max.	-	1 kWords data, 1 kWords retentative memory	1 kWords data, 1 kWords retentative, 64 words system memory
Ladder monitor	---	---	---	---
Programming Console function	Supported	---	---	---
Device monitor	---	---	---	---
Barcode reader connection	Supported	---	---	---
Printer connection	---	Supported	Supported	Supported
Multivendor support	Supports most third party PLCs. [2]	---	Supports most third party PLCs [2]	Supports most third party PLCs [2]
Backlight life	50,000 hours average	50,000 hours average	LED, min. 50,000 hours	LED, min. 50,000 hours

1. Model numbers with 'B' have a black frame and without a beige frame.
2. Please contact your local OMRON representative for a list of available drivers.