

Touch panel specifications

Item	NSA12-TX11_-E NSA12-TX12_-E	NSA15-TX11_-E NSA15-TX12_-E	NSA12-TX01_-E	NSA15-TX01_-E	NSA-TX151	NSA-TY171	
Display panel	Type	TFT color LCD					
	Size	12.1 inches	15 inches	12.1 inches	15 inches	15.0 inches	17.0 inches
	Resolution	1024×768 dots				1280×1024 dots	
	Brightness	300 cd/m ² (typical)			270 cd/m ² (typical)		200 cd/m ² (typical)
	Viewing angle	130° left to right, 90° up and down					
	Colors displayed	262,144					
Backlight	Type	2 CCFL	4 CCFL	2 CCFL	4 CCFL	2 CCFL	4 CCFL
	Brightness adjustment	Three-level software adjustment ^{*1}			10 level adjustment by rotary switch		
	Backlight not lit detection	The software reads the lamp burnout detection signal from the inverter ^{*2}			-	-	
	Service life	50,000 hours min. ^{*3}					
Touch panel	Type	Analog resistive type					
	Effective input area Size in mm (H×W)	185.5×247	229×305	185.5×247	229×305	229×305	272×340
	Operating service life	10,000,000 operations (with non-stop key stroking using fingers to input) 100,000 characters (with non-stop character entry using a stylus to input)					
Interface	USB ports	4 x USB2.0/1.1 for type-A connectors (2 on front side)		2 x USB2.0/1.1 for type-A connectors		3 x USB 1.1 for type-A connectors (2 on front side) 1 x USB 1.1 (used for touch) for type-B connector	
	Video Input	-				1 x DVI-D port	
POWER LED indicator	Yes (green)						
Service life ^{*4}	50,000 hours at 25°C		50,000 hours at 40°C		50,000 hours at 30°C		

*1 The contrast cannot be adjusted significantly.

*2 It is not the service life, but rather lamp failure due to hardware problems such as a broken wire that is detected. Backlight not lit detection means both backlight lamps have burnt out.

*3 The service life is a guideline for maximum contrast at room temperature with normal humidity and is provided strictly for reference. It varies significantly with the ambient temperature.

The service life will be shorter under extreme (high or low) temperature conditions and falls off sharply particularly under low-temperature conditions.

*4 The service life is a guideline that is provided strictly for reference. It varies with factors such as the installation location and operating conditions.

General specifications

Item	NSA1_-TX11_-E NSA1_-TX12_-E	NSA1_-TX01_-E	NSA-CPU0_-E	NSA-TX151	NSA-TY171
Rated supply voltage	24 VDC				
Allowable supply voltage range	20.4 VDC to 27.6 VDC (24 VDC ±15%)	20.0 VDC to 27.6 VDC (24 VDC ±15%)			
Power consumption	12 inches: 65 W max. 15 inches: 75 W max.	12 inches: 80 W max. 15 inches: 100 W max.	60 W max.	40 W max.	55 W max.
Ambient operating temperature	0 to 50°C ^{*1}				
Ambient storage temperature	-10 to 60°C ^{*1}				
Ambient operating humidity	10% to 80% with no condensation ^{*1}				
Ambient storage humidity	10% to 85% with no condensation ^{*1}				
Operating atmosphere	Must be free of corrosive gases. Must be fairly dust free.				
Noise resistance	Conforms to IEC6100-4-4, power supply line: 2 kV				
Vibration resistance (in operation)	Conforms to JIS C0041, 0.05 mm amplitude at 10 to 55 Hz for 50 min. Each in the X, Y, and Z directions				
Shock resistance (in operation)	Conforms to JIS C0041, 196 m/s ² three times each in the X, Y, and Z directions				
Degree of protection	Front panel: IP65 or the equivalent ^{*1}		-	IP65F (front panel oil protection) ^{*1}	
Weight	12 inches: 5 kg max. 15 inches: 7 kg max.	12 inches: 5 kg max. 15 inches: 7 kg max.	4 kg max.	6 kg max.	7 kg max.
Dimensions in mm (HxWxD)	12 inches: 281×342×98 15 inches: 296.5×397.5×103	12 inches: 264×322×100 15 inches: 312×384×108	233x308x76.5	328x404x57	371x436x57

*1 For more information, please check the user manual.

CF & HDD

Item	NSA-CEX02	NSA-CEX04	NSA-CEX08	NSA-HEX80
Storage capacity	2 GB	4 GB	8 GB	80 GB
Interface	IDE			SATA

Type		Order Code
Industrial PC panel, 600 MHz CPU	12 inches, 600 MHz, 256 MB internal, black	NSA12-TX11B
	12 inches, 600 MHz, 256 MB internal, silver	NSA12-TX11S
	15 inches, 600 MHz, 256 MB internal, black	NSA15-TX11B
	15 inches, 600 MHz, 256 MB internal, silver	NSA15-TX11S
	12 inches, 600 MHz, 512 MB internal, black	NSA12-TX12B
	12 inches, 600 MHz, 512 MB internal, silver	NSA12-TX12S
	15 inches, 600 MHz, 512 MB internal, black	NSA15-TX12B
	15 inches, 600 MHz, 512 MB internal, silver	NSA15-TX12S
Industrial PC panel, 1.3 GHz CPU	12 inches, 1.3 GHz, 512 MB internal, 2 GB storage, black	NSA12-TX01B-E
	12 inches, 1.3 GHz, 512 MB internal, 2 GB storage, silver	NSA12-TX01S-E
	15 inches, 1.3 GHz, 512 MB internal, 2 GB storage, black	NSA15-TX01B-E
	15 inches, 1.3 GHz, 512 MB internal, 2 GB storage, silver	NSA15-TX01S-E
Industrial PC box, 1.3 GHz CPU	1.3 GHz, RAM: 512 MB, DOM: 2 GB	NSA-CPU01-E
	1.3 GHz, RAM: 512 MB, DOM: 4 GB	NSA-CPU02-E
	1.3 GHz, RAM: 1 GB, DOM: 2 GB	NSA-CPU03-E
	1.3 GHz, RAM: 1 GB, DOM: 4 GB	NSA-CPU04-E
Touchscreen panel	15 inches, black	NSA-TX151B
	15 inches, silver	NSA-TX151S
	17 inches, black	NSA-TY171B
	17 inches, silver	NSA-TY171S

Description	Order Code
2 GB CF with XP Embedded English	NSA-CEX02-E
4 GB CF with XP Embedded English	NSA-CEX04-E
8 GB CF with XP Embedded English	NSA-CEX08-E
80 GB HDD, no OS	NSA-HEX80
512 MB DDR-SD RAM (non-ECC)	NSA-MR581
1 GB DDR-SD RAM (non-ECC)	NSA-MR191
DVI & USB cable 0.1 m	NSA-DU02
DVI & USB cable 2 m	NSA-DU22
DVI & USB cable 5 m	NSA-DU52
DVI cable 10 m	NSA-DV101
Set of 5 Anti-reflection sheets for 12 inches	NS12-KBA04
Set of 5 Anti-reflection sheets for 15 inches	NS15-KBA04

