

**NEW** New product line-up

**For monitor use**

**21.3-inch High definition monochrome SFT**

Flagship 21.3-inch product with 2800x2100 pixels (6 mega pixels).  
A high resolution display suitable for medical applications.

● NL280210AM15-04A (21.3-inch QSXGA+) **SFT**



**For industrial use**

**15.0-inch SFT and LED backlight**

A long-life\* white LED backlight model with small foot print.  
A high contrast, wide operating temperature, and wide viewing angle display employing NLT's SFT technology.

● NL10276BC30-39 (15.0-inch XGA) **SFT**



**12.1-inch Portrait view compatible**



Portrait view compatible with long-life\* white LED backlight.  
A high contrast and wide operating temperature display suitable for a variety of industrial applications.

● NL10276BC24-21L (12.1-inch XGA)



**10.6-inch wide format with SFT and Built-in LED driver**



10.6-inch WXGA with an LED drive circuit.  
Achieves vivid color reproduction and low power consumption by adopting an LED backlight and NLT's proprietary ColorXcell technology.

● NL12876AC18-03/03D (10.6-inch WXGA) **SFT**



**8.4-inch High luminance LED backlight**

A long-life\* white LED backlight model.  
Vivid and eco-friendly display utilizing NLT's proprietary ColorXcell technology.  
Outdoor viewable model is also available.

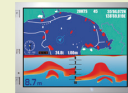
**Outdoor viewable high luminance model (ST-NLT)**

● NL6448BC26-27C (8.4-inch VGA)



**High luminance model**

● NL6448BC26-27F (8.4-inch VGA)



**8.4-inch LED backlight**

Standard model with a long-life\* white LED backlight.  
Vivid and eco-friendly display utilizing NLT's proprietary ColorXcell technology.

● NL6448BC26-27/27D (8.4-inch VGA)



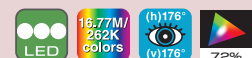
**Upcoming Product under development**

**9.0-inch wide format Full HD model with SFT and built-in LED driver**



Full HD model with wide viewing angles.  
Amorphous silicon TFT which provides a high resolution, mid-size LCD module.

● NL192108AC10-01D (9.0-inch FHD) **SFT**



\* Specification values are tentative.

\* 25°C : 70,000H ◆ SFT : Super Fine TFT, ST-NLT : Super-Transmissive Natural Light TFT ◇ ColorXcell technology is NLT Technologies' proprietary color enhancement technology.

※ For product availability, please contact our sales offices or our agents.



# Product Specifications

Screen Size	21.3 inch (54cm diagonal)	15.0 inch (38cm diagonal)	12.1 inch (31cm diagonal)	10.6 inch Wide (27cm diagonal)	
Part Number	NL280210AM15-04A	NL10276BC30-39	NL10276BC24-21L	NL12876AC18-03	NL12876AC18-03D
Resolution	2800 x 2100	1024 x 768	1024 x 768	1280 x 768	1280 x 768
Display Area (mm)	432.6 x 324.45	304.128 x 228.096	245.76 x 184.32	230.4 x 138.24	230.4 x 138.24
Display Color	1024 gray scales/ sub-pixel 3072 gray scales/ pixel	16.77M colors	16.77M / 262K colors	16.77M / 262K colors	16.77M / 262K colors
Pixel Pitch (mm)	0.154 x 0.154	0.297 x 0.297	0.24 x 0.24	0.18 x 0.18	0.18 x 0.18
Luminance	1400cd/m <sup>2</sup>	270cd/m <sup>2</sup>	450cd/m <sup>2</sup>	300cd/m <sup>2</sup>	300cd/m <sup>2</sup>
Contrast Ratio	1000 : 1	900 : 1	900 : 1	1000 : 1	1000 : 1
Viewing Angle (Up,Down,Left,Right) Contrast Ratio ≥10 : 1	88°, 88°, 88°, 88°	88°, 88°, 88°, 88°	80°, 80°, 80°, 80°	88°, 88°, 88°, 88°	88°, 88°, 88°, 88°
Response Time*1	32ms	25ms	18ms	25ms	25ms
Interface	4port LVDS (LCR 10 bits each)	LVDS (RGB 8 bits each)	LVDS (RGB 8 bits each/ 6 bits each)	LVDS (RGB 8 bits each/ 6 bits each)	LVDS (RGB 8 bits each/ 6 bits each)
Power Supply Voltage	Signal : 12.0V Backlight : 12.0V	3.3V	3.3V	Signal : 3.3V Backlight : 5.0~12.0V	Signal : 3.3V Backlight : 5.0~12.0V
Power Consumption	71W	9.8W <sup>2</sup>	5.2W <sup>2</sup>	3.3W	3.3W
Operating Temperature	0 °C ~ +55 °C	-20°C ~ +70 °C	-30°C ~ +80°C	-20°C ~ +70°C	-20°C ~ +70°C
Storage Temperature	-20°C ~ +60 °C	-20°C ~ +80 °C	-30°C ~ +80°C	-30°C ~ +80°C	-30°C ~ +80°C
Polarizer Surface	Antiglare	Antiglare	Clear	Clear	Antiglare
Module Size W x H x D (mm) (D : max)	457.0 x 350.0 x 40.3	326.5 x 253.5 x 12.2	260.5 x 203.0 x 9.2	248.8 x 155.8 x 7.0	248.8 x 155.8 x 7.0
Weight	3000g	970g	490g	270g	270g
Reverse Scan	—	—	○	○	○
Backlight	Direct type CCFL	White LED	White LED	White LED	White LED
Recommended Inverter Recommended LED driver board <Suitable cable>	Built in	150PW02F <150CBL02>	104PW03F <121CBL02>	Built in	Built in
Remarks					

Screen Size	8.4 inch (21cm diagonal)			
Part Number	NL6448BC26-27C	NL6448BC26-27F	NL6448BC26-27	NL6448BC26-27D
Resolution	640 x 480	640 x 480	640 x 480	640 x 480
Display Area (mm)	170.88 x 128.16	170.88 x 128.16	170.88 x 128.16	170.88 x 128.16
Display Color	16.77M / 262K colors	16.77M / 262K colors	16.77M / 262K colors	16.77M / 262K colors
Pixel Pitch (mm)	0.267 x 0.267	0.267 x 0.267	0.267 x 0.267	0.267 x 0.267
Luminance	900cd/m <sup>2</sup>	900cd/m <sup>2</sup>	500cd/m <sup>2</sup>	500cd/m <sup>2</sup>
Contrast Ratio	1000 : 1	1000 : 1	1000 : 1	1000 : 1
Viewing Angle (Up,Down,Left,Right) Contrast Ratio ≥10 : 1	80°, 80°, 80°, 80°	80°, 80°, 80°, 80°	80°, 80°, 80°, 80°	80°, 80°, 80°, 80°
Response Time*1	18ms	18ms	18ms	18ms
Interface	LVDS (RGB 8 bits each / 6 bits each)	LVDS (RGB 8 bits each / 6 bits each)	LVDS (RGB 8 bits each / 6 bits each)	LVDS (RGB 8 bits each / 6 bits each)
Power Supply Voltage	3.3V	3.3V	3.3V	3.3V
Power Consumption	5.0W <sup>2</sup>	5.0W <sup>2</sup>	3.1W <sup>2</sup>	3.1W <sup>2</sup>
Operating Temperature	-30°C ~ +80°C	-30°C ~ +80°C	-30°C ~ +80°C	-30°C ~ +80°C
Storage Temperature	-30°C ~ +80°C	-30°C ~ +80°C	-30°C ~ +80°C	-30°C ~ +80°C
Polarizer Surface	Clear + Antireflection	Clear	Clear	Antiglare
Module Size W x H x D (mm) (D : max)	200.0 x 152.0 x 8.7	200.0 x 152.0 x 8.7	200.0 x 152.0 x 8.7	200.0 x 152.0 x 8.7
Weight	260g	260g	260g	260g
Reverse Scan	○	○	○	○
Backlight	White LED	White LED	White LED	White LED
Recommended Inverter Recommended LED driver board <Suitable cable>	104PW03F <121CBL02>	104PW03F <121CBL02>	104PW03F <121CBL02>	104PW03F <121CBL02>
Remarks				

- Thin and low power consumption white LED
- Long-life white LED
- Monochrome
- Multi-bit driver
- Wide color gamut
- ColorXcell technology
- Wide operating-temperature range -30°C ~ +80°C
- Wide
- Portrait view compatible

※ Please see the Data Sheet for detailed specifications. All values are typical values (excluding the depth for module size). Values in brackets are tentative.

\* 1 Values equal Ton+Toff (10% ↔ 90%). \* 2 Values do not include inverter or LED driver board power dissipation. ◆ SFT : Super Fine TFT, ST-NLT : Super-Transmissive Natural Light TFT