

DATA SHEET

Industrial PanelMount Displays

Premium Quality STRONGARM Displays (NEMA 12/4/4X)

Features

- ▶ Designed for harsh and demanding **industrial environments**.
- ▶ **NEMA 4/4X** for washdown and wipedown applications.
- ▶ **Precision-milled, Heavy-duty Bezels** ensure a longer display life.
- ▶ **Polycarbonate Viewing Windows** are scratch-resistant and UV-resistant.
- ▶ **Touchscreen Options** for every industrial environment.
- ▶ **Powder-coated Aluminum Bezels** can be provided with custom colors or choose from a variety of stock colors.
- ▶ **Private Labeling** available for OEM manufacturers.
- ▶ **Class I Div II Certified** when mounted in a Strongarm enclosure.
- ▶ **Stainless Steel Bezels** come standard with a #4 satin brush finish. 304 and 316 SS options.
- ▶ **Available from Stock**
- ▶ **Standard 3 year warranty**
- ▶ **UL/cUL/CB Listed, Type 12/4 and 12/4/4X (IP 65/66)**



• Industrial Strength

STRONGARM's PanelMount Displays are designed to survive the most demanding industrial applications. The display elements are integrated directly into precision-milled aluminum or stainless steel bezels and are protected by polycarbonate windows, or various touch screen options.

• Current Technology

STRONGARM uses the most current technology available. You can be sure that the STRONGARM display you purchase today is not yesterday's trailing edge.

STRONGARM's unique combination of technology and industrial design makes us the industry leader in industrial displays for every application.

DISPLAY SPECIFICATIONS

	12.1"	15.1"	15.1" HiBrite	17.1"	19.1" /19G
DISPLAY					
Native Resolution	1024 x 768	1024 x 768	1024 x 768	1280 x 1024	1280 x 1024
Aspect Ratio	4:3	4:3	4:3	4:3	4:3
Inputs	VGA, DVI	VGA, DVI	VGA, DVI	VGA, DVI	VGA, DVI
Brightness	500 nits	250 nits	1200 nits	250 nits	250 nits/350 nits
Contrast Ratio	700:1	700:1	850:1	600:1	1000:1
Number of Colors	16.7 million	16.2 million	16.7 million	16.7 million	16.7 million
Viewing Angle	160°/160°	160°/140°	140°/120°	180°/180°	170°/160°
POWER					
Max Power Consumption	20W	19W	50W	33W	18W
Input	AC 100-240V, DC 12V or 24V	AC 100-240V, DC 12V or 24V	AC 100-240V, DC 12V or 24V	AC 100-240V, DC 12V or 24V	AC 100-240V, DC 12V or 24V
ENVIRONMENTAL					
Operating Conditions					
Temperature	50° to 131°F (10° to 55°C)	32° to 149°F (0° to 65°C)	32° to 140°F (0° to 60°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)
Humidity	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing
PHYSICAL					
Weight	Aluminum: 10.8 lb (4.9 kg) Stainless: 11.5 lb (5.2 kg) <i>With Touchscreen:</i> Aluminum: 11.5 lb (5.2 kg) Stainless: 12.2 lb (5.5 kg)	Aluminum: 13.2 lb (6.0 kg) Stainless: 13.9 lb (6.3 kg) <i>With Touchscreen:</i> Aluminum: 14.0 lb (6.3 kg) Stainless: 15.0 lb (6.8 kg)	Aluminum: 13.2 lb (6.0 kg) Stainless: 13.9 lb (6.3 kg) <i>With Touchscreen:</i> Aluminum: 14.0 lb (6.3 kg) Stainless: 15.0 lb (6.8 kg)	Aluminum: 14.0 lb (6.3 kg) Stainless: 15.0 lb (6.8 kg) <i>With Touchscreen:</i> Aluminum: 13.3 lb (6.0 kg) Stainless: 14.3 lb (6.5 kg)	Aluminum: 16.5 lb (7.5 kg) Stainless: 20.9 lb (9.5 kg) <i>With Touchscreen:</i> Aluminum: 17.6 lb (8.0 kg) Stainless: 19.9 lb (9.0 kg)

TOUCHSCREEN OVERVIEW

Resistive (5-Wire) (All sizes)

Resistive is the most common type of touchscreen technology, mainly due to its accuracy and reliability. It is a low cost solution found in many industrial applications. The standard resistive touchscreen consists of a glass panel and resistive coating plus a polyester cover sheet which has a conductive coating. It can withstand such environmental conditions as liquid spills, splashes, and HMI industrial wash downs. It has a lifecycle that exceeds most other touchscreens at 35 million finger touches, and works with fingers, gloves, and other various styluses.

GFG Resistive (5-Wire) (15.1", 19.1")

The GFG resistive touchscreen is similar to the standard resistive touchscreen in terms of operation. Additionally, it is designed with an anti-scratch surface of thin borosilicate glass over top of the polyester overlay making it extremely water proof. The GFG resistive touchscreen has a surface hardness greater than 5 Mohs, yet maintains the accuracy and reliability of the standard 5-Wire resistive. It has an easily cleanable surface and is corrosion and scratch resistant. The GFG-Resistive touchscreen works with fingers, gloves, and other various styluses.

DISPLAY SPECIFICATIONS (continued)

	19" HiBrite	19" Widescreen	21.5" Widescreen	22" Widescreen	24" Widescreen
DISPLAY					
Native Resolution	1280 x 1024	1440 x 900	1920 x 1080	1680 x 1050	1920 x 1080
Aspect Ratio	4:3	16:10	16:9	16:10	16:9
Inputs	VGA, DVI	VGA, DVI	VGA, DVI	VGA, DVI	VGA, DVI
Brightness	1200 nits	250 nits	250 nits	250 nits	250 nits
Contrast Ratio	1100:1	1000:1	1000:1	1000:1	1000:1
Number of Colors	16.7 million	16.7 million	16.7 million	16.7 million	16.7 million
Viewing Angle	170°/160°	170°/160°	170°/160°	170°/160°	170°/160°
POWER					
Max Power Consumption	52W	17W	22W	30W	25W
Input	AC 100-240V DC 12V or 24V	AC 100-240V DC 12V or 24V	AC 100-240V DC 12V or 24V	AC 100-240V DC 12V or 24V	AC 100-240V DC 12V or 24V
ENVIRONMENTAL					
Operating Conditions					
Temperature	32° to 140°F (0° to 60°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)
Humidity	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing
PHYSICAL					
Weight	Aluminum: 16.5 lb (7.5 kg) Stainless: 20.9 lb (9.5 kg) <i>With Touchscreen:</i> Aluminum: 17.6 lb (8.0 kg) Stainless: 19.9 lb (9.0 kg)	Aluminum: 16.5 lb (7.5 kg) Stainless: 17.5 lb (8.0 kg) <i>With Touchscreen:</i> Aluminum: 17.5 lb (8.0 kg) Stainless: 18.5 lb (8.4 kg)	Aluminum: 19.4 lb (8.8 kg) Stainless: 20.4 lb (9.2 kg) <i>With Touchscreen:</i> Aluminum: 19.5 lb (8.8 kg) Stainless: 20.5 lb (9.3 kg)	Aluminum: 21.0 lb (9.5 kg) Stainless: 22.0 lb (10.0 kg) <i>With Touchscreen:</i> Aluminum: 19.8 lb (9.0 kg) Stainless: 20.8 lb (9.4 kg)	Aluminum: 20.2 lb (9.2 kg) Stainless: 21.2 lb (9.6 kg) <i>With Touchscreen:</i> Aluminum: 20.2 lb (9.2 kg) Stainless: 21.2 lb (9.6 kg)

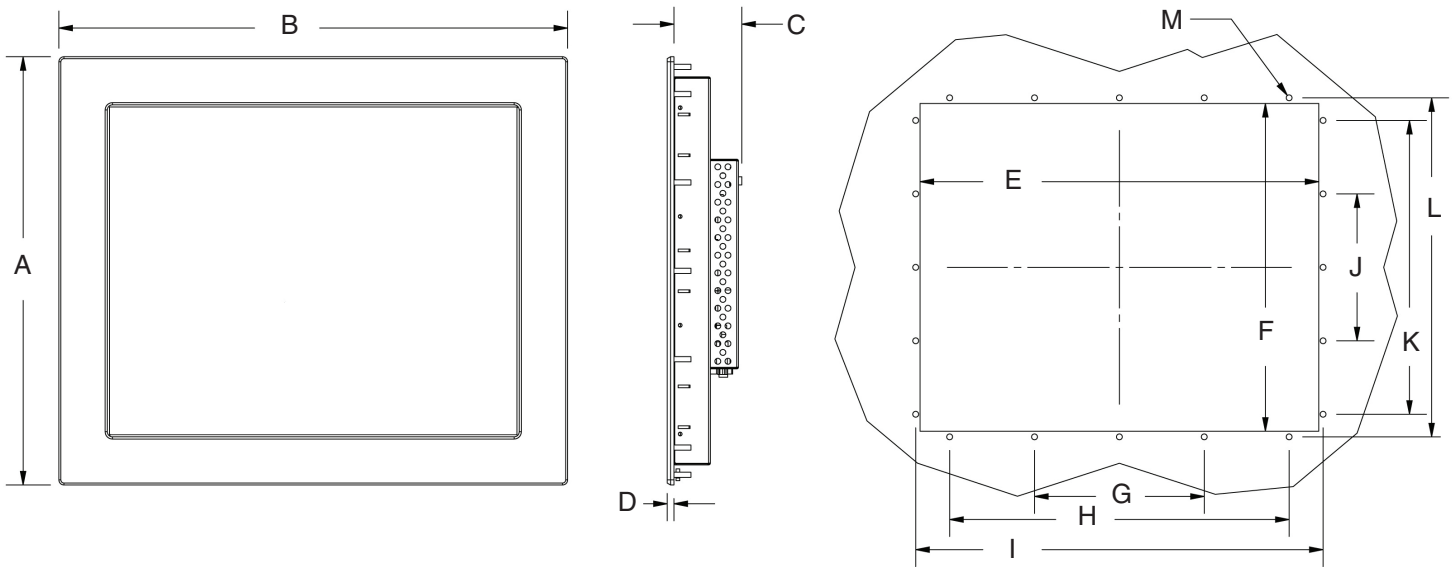
Infrared (15.1", 17.1", 19.1", 24"W)

Strongarm's infrared touchscreens are made to withstand the most severe environments. The filter or window is made from 3/8" thick polycarbonate which makes these touchscreens almost completely vandal resistant. It's the only technology that does not rely on an overlay or substrate; it uses infrared LEDs so it's impossible to wear out the sensor. The touch frame contains a row of infrared LEDs and photo transistors, each mounted on two opposite sides to create a grid of invisible infrared light. These touchscreens are a solid state device and are very tolerant to shock and vibration. Infrared touchscreens work with gloves and various styluses.

Projected Capacitive (17.1", 19.1")

Also known as PCAP, projected capacitive touchscreens are a variant of the capacitive touch technology. PCAP touchscreens are made up of a matrix of rows and columns of conductive material layered on sheets of glass. The outer layer of vandal-proof glass can be up to 18mm in thickness. When the touchscreen is energized and a conductive object such as a finger comes into contact with the glass touch panel, it distorts the electrostatic field at that specific point. Even if the glass is scratched or broken it will still function properly. PCAP touchscreens work with gloves and are best suited for outdoor applications, as it works well in rain, snow, ice and dust.

Dimensions



Cutout Dimensions

	12.1"	15.1"	17.1"	19.1"	19"W	21.5"W	22"W	24"W
A	11.63"	13.75"	13.75"	15.75"	14.00"	15.50"	15.25"	16.00"
B	14.00"	16.75"	16.75"	18.75"	19.75"	21.75"	22.25"	25.25"
C	2.50"	2.25"	2.50"	2.50"	2.63"	2.57"	2.50"	2.50"
D	.19"*	.19"*	.19"*	.19"*	.19"*	.19"*	.19"*	.19"*
E	12.38"	15.63"	15.63"	17.62"	18.50"	20.63"	21.06"	24.00"
F	10.00"	12.50"	12.50"	14.50"	12.63"	14.38"	14.06"	14.75"
G	NA**	7.00"	7.00"	7.50"	8.00"	9.5"	9.00"	10.00"
H	NA	14.00"	14.00"	15.00"	12.00"	19.00"	18.00"	20.00"
I	13.25"	16.00"	16.00"	18.00"	19.00"	21.00"	21.50"	24.00"
J	3.00"***	3.63"***	3.63"***	6.50"	6.00"	4.00"	4.00"***	4.26"***
K	NA	10.86"	10.86"	13.00"	12.00"	12.00"	12.00"	12.76"
L	10.50"	13.00"	13.00"	15.00"	13.25"	14.76"	14.50"	15.26"
M	1/4"Ø	1/4"Ø	1/4"Ø	1/4"Ø	1/4"Ø	1/4"Ø	1/4"Ø	1/4"Ø

* .19" for NEMA 4X Stainless bezels, .33" for NEMA 4/12 painted aluminum bezels

** 12.1" display has four corner studs, one additional stud positioned centrally on top and bottom, and two additional studs on both left and right sides centrally positioned 3.00" apart

***No central vertical stud on the 12.1", 15.1", 17.1", 22" Widescreen and 24" Widescreen displays

STRONGARM®