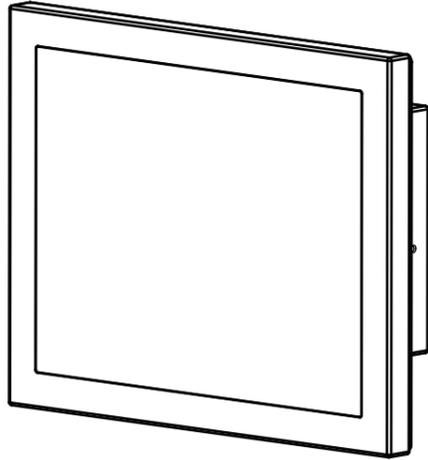


SG-S156/ SG-S176/ SG-S216

Quick Reference Guide



Ver. Q2

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Specifications

System

CPU Type	Intel® 7th Gen. Core™ i5-7300U Processor Intel® Pentium 4415U Processor
Memory Support	1 x DDR4 2133MHz SO-DIMM socket (up to 16GB)
Operating System	Windows® 10 IoT LTSC 2019 Ubuntu16.04 LTS
Enclosure	Stainless SUS304/SUS316
IP Rating	IP66/IP69K
Power Input	DC In 12V/24V
Watchdog	1~255 second Watchdog timer selectable
Mounting Support	Wall Mount / VESA 100 / Table Stand
System Weight	SG-S156: 7.5kg / SG-S176: 8.5kg / SG-S216: 9.5kg
Dimensions (WxHxD)	SG-S156: 420 x 335 x 70mm / SG-S176: 450 x 381 x 70mm SG-S216: 590 x 395 x 70mm
Certificate	FCC / CE

I/O Ports

Power Input	1 x M12 Waterproof Connector with Remote Switch Supports 12V/24V DC
Serial Port	1 x COM port with M12 waterproof connector COM 1 for RS-232/422/485 selectable under BIOS
LAN	2 x GbE LANs with M12 waterproof connectors Supports Wake-On-LAN
USB	2 x USB 2.0 with M12 waterproof connectors
Storage	1 x 2.5" SATA III HDD or SSD
Expansion Slot	1 x full-sized Mini PCIe slot (Mini PCIe and USB signals)

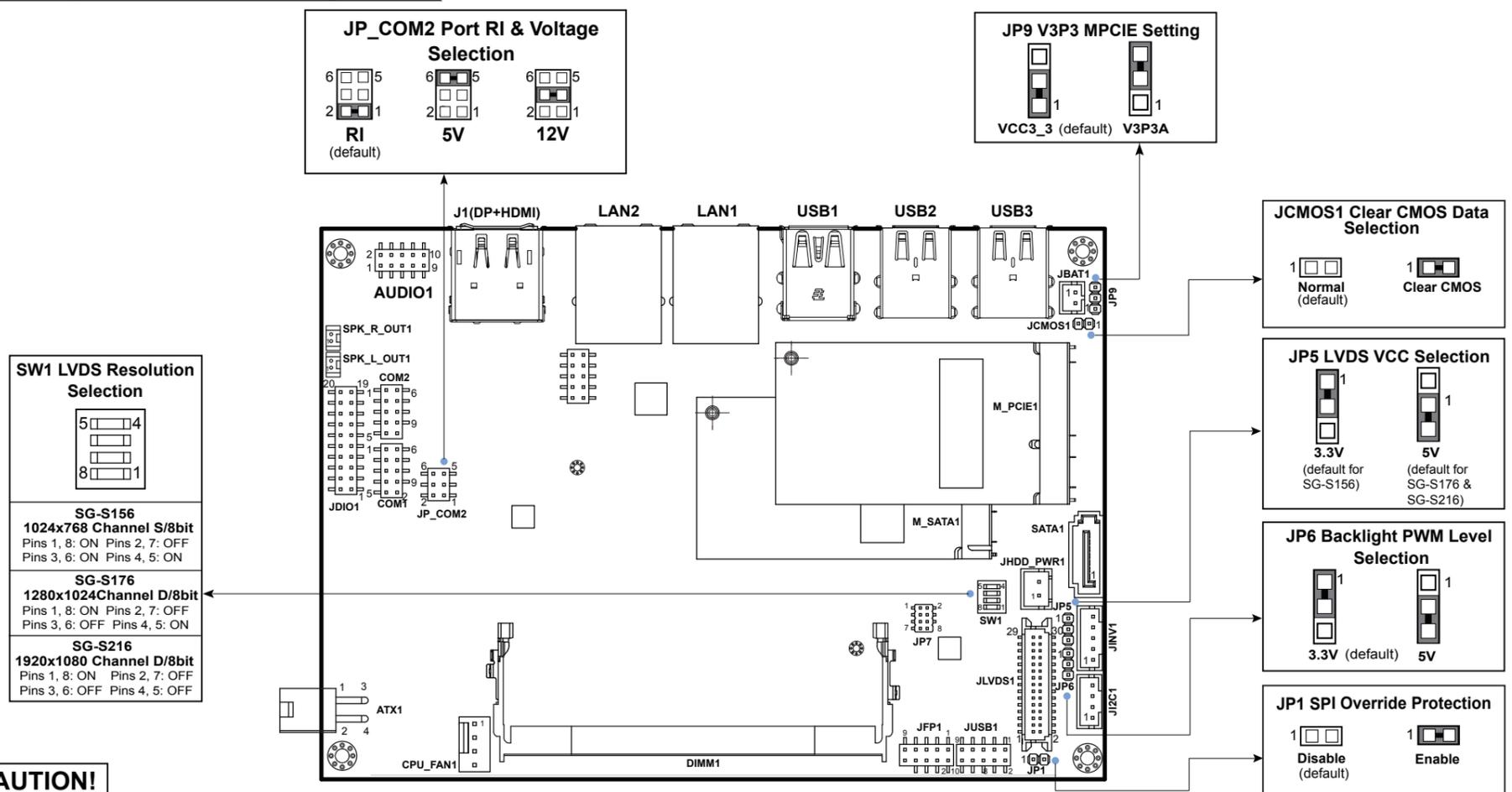
Display

LCD	SG-S156: 15" TFT LCD(LED) XGA (1024 x 768), 450 nits SG-S176: 17" TFT LCD(LED) XGA (1280 x 1024), 350 nits SG-S216: 21.5" TFT LCD(LED) XGA (1920 x 1080), 350 nits
Touchscreen	Projected capacitive or 5-wire resistive touchscreen (USB I/F)

Environment

Operating Temperature	HDD: 0°C~40°C (32°F~104°F) / SSD: 0°C ~ 50°C (32°F ~122°F) (with airflow)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Humidity	20%~ 90%

Jumper Setting



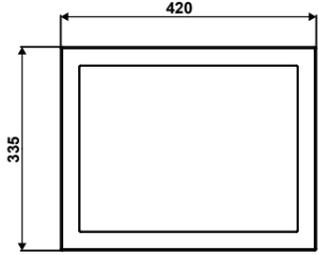
CAUTION!

- Danger of explosion may occur if the battery is replaced incorrectly. Replace batteries only with the same or equivalent type recommended by the manufacturer. Dispose the used batteries according to the manufacturer's instructions.
- The waterproof capability of the device may be incapable when the screws are loosened.
- The O-ring to seal the device may be damaged during the maintenance process. Qualified engineer is recommended to make the O-ring replacement to keep the waterproof capability of the device.

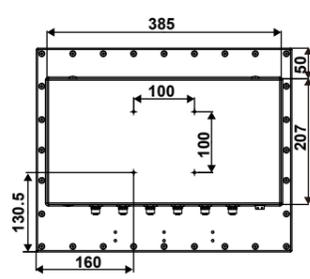
SG-S156 Overview

(Unit: mm)

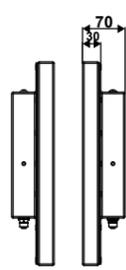
Front View



Rear View



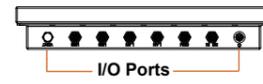
Side View



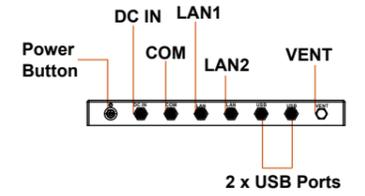
Top View



Bottom View

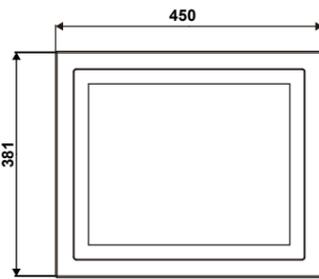


Rear I/O View

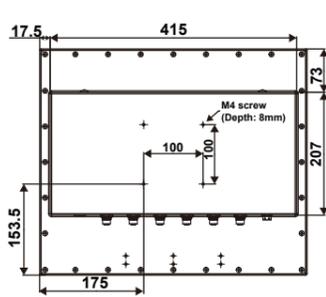


SG-S176 Overview

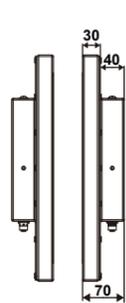
Front View



Rear View



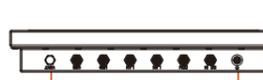
Side View



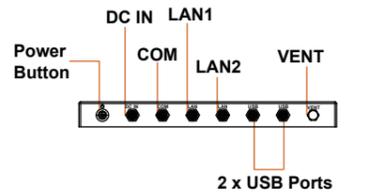
Top View



Bottom View

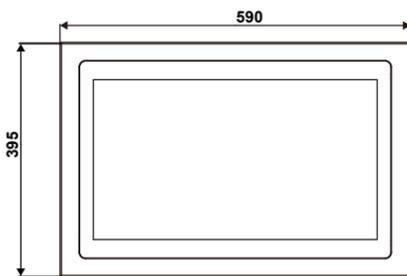


Rear I/O View

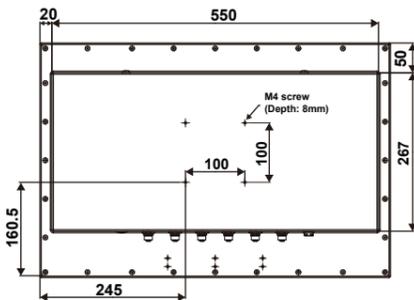


SG-S216 Overview

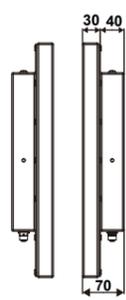
Front View



Rear View



Side View



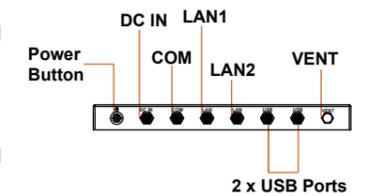
Top View



Bottom View

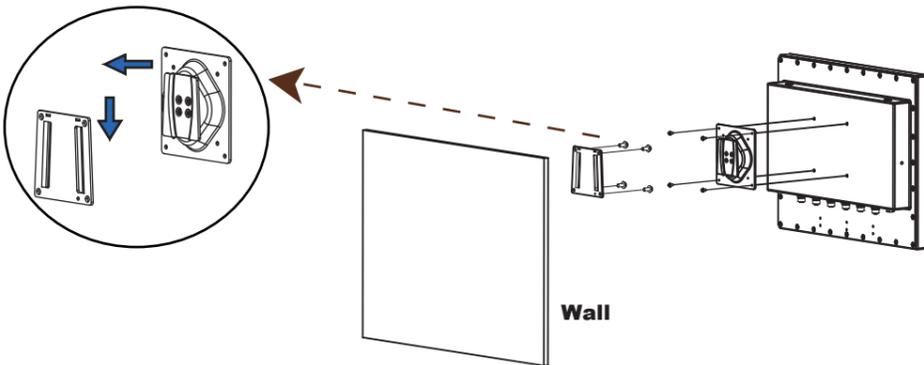


Rear I/O View



Quick Setup

Installing VESA Mount



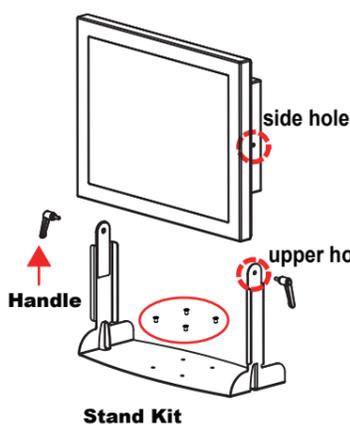
VESA Mount Accessories

VESA Mount



VESA Mount Kit x 1

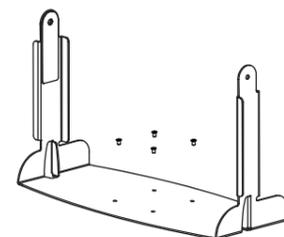
Installing Stand Kit



Step 1. Attach Panel PC onto Stand Kit and align the side holes on the rear of Panel PC with the upper holes of the Stand Kit.

Step 2. Fasten the two handles into the side holes of the Stand Kit to secure the system and complete.

Stand Installation Accessories



Handle x 2

Stand Kit x 1 + Screw x 4

Safety Precaution

The following messages are reminders for safety on how to protect your system from damages and extend a long life of the system.

1. Check the Cable Voltage

- The range of operating voltage should be DC 12V/24V. Otherwise, the system could be damaged.

2. Environmental Conditions

- Place your SG-S156/SG-S176/SG-S216 on a sturdy, level surface. Be sure to allow enough space to have easy access around the system.
- Avoid extremely hot or cold place to install the system.
- Avoid exposure to sunlight for a long period of time or in an airtight space.
- Avoid the system from any heating device or using the system when it's been left outdoors in a cold winter day.
- Bear in mind that the operating ambient temperature is from 0°C ~ 40°C for HDD & 0°C ~ 50°C for SSD.
- Avoid moving the system rapidly from a hot place to a cold place and vice versa because condensation may come from inside of the system.
- Placing the sy in strong vibrations may cause hard disk failure.
- Don't place the system close to any radio-active device in case of signal interference.

3. Handling

- Do not turn the system upside down. This may cause the hard drive to mal-function.
- Avoid putting heavy objects on top of the system.

4. Good Care

- When the outside of the case is stained, remove the stain with a neutral washing agent with a dry cloth.
- Never use strong agents such as benzene and thinner to clean the system.
- If heavy stains are present, moisten a cloth with diluted neutral washing agent or with alcohol and then wipe thoroughly with a dry cloth.
- If dust has been accumulated on the outside, remove it by using a special vacuum cleaner for computers.

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

WARNING! Some internal parts of the system may have high electrical voltage. And therefore we strongly recommend that qualified engineers can open and disassemble the system. Please handle LCD and Touchscreen with extra care as they are easily breakable.