

AFOLUX-4 Series AFOLUX All-in-One In-Wall Panel PC

8"~15" Fanless Panel PC with Changeable Faceplate and Sticker Skin

The fanless AFL-4xxx series with streamlined design based on the Intel® Atom™ processor is designed in flexible options to match your diverse style.



Fanless

An on-board 1.6GHz Intel® Atom™ N270 CPU ensures low power requirements. Metal casting design housing replaces the fan as it helps the dissipate heat.

Changeable Faceplate/Sticker Skin

Multiple faceplate/skin sticker available to match diverse decoration styles

Easy In-wall in minutes

In-wall mounting just three simple steps: cut-out the panel , screw on and put on the faceplate

VESA Mounting Compliant



Features



- 8" ~ 15" TFT LCD with resistive touch screen.
- Fanless system with Intel® Atom™ process N270 1.6GHz CPU
- Changeable faceplate and sticker skin
- In-wall mechanism design allows easy to installation in minutes
- Digital I/O RJ-12 port that provides extension for peripherals such as a cash drawer device, lamp, alarms etc.
- Build-in CMOS camera with digital microphone and two 1.5W speakers for multimedia applications
- Enabling easier access to the internet through a HSUPA network (Optional)
- Built-in bluetooth technology rids systems of cables and allows wireless connection to peripheral devices like head phones, keyboard and mouse
- VESA-mountable for flexibility in mounting and deployment
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing.
- IP64 front panel compliant
- Windows XP Embedded/Windows CE/Linux (Debian 2.6.26) Support



Ambient Light Sensor

AFL-4xxx series built in the ambient light sensor in front of the panel to automatically detect the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:

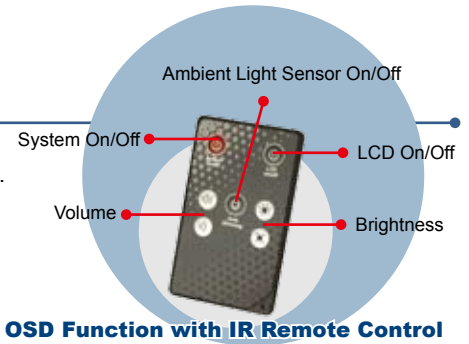
- Avoid eye strained and tired, to provide comfortable viewing
- Power consumption saving
- Extend lamp lifetime



Day: Higher Ambient Luminance



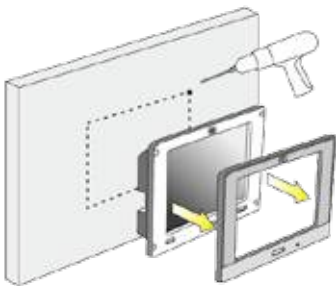
Night: Lower Ambient Luminance



Easy In-wall Installation in Minutes

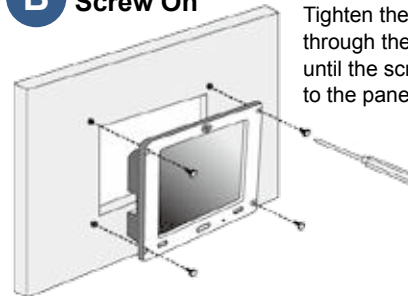
AFL-4xxx series was not only increases flexibility of versatile patterns of the faceplate, but also ease of installation.

A Cut Out the Panel



Select the position on the panel to mount the flat panel PC. Cut out a section from the panel that corresponds to the rear panel dimensions.

B Screw On

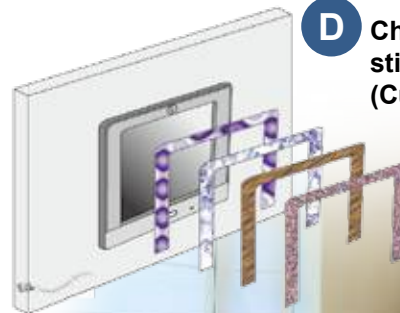


Tighten the screws that pass through the panel mounting holes until the screws are firmly secured to the panel.

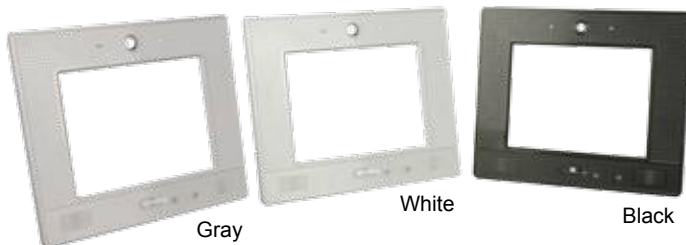
C Put on the Faceplate



D Changeable faceplate sticker skin (Customize by order)



Changeable Faceplate in Gray/White/Black Color



Versatile Faceplate Sticker Skin Patterns Enhance your Design Style!

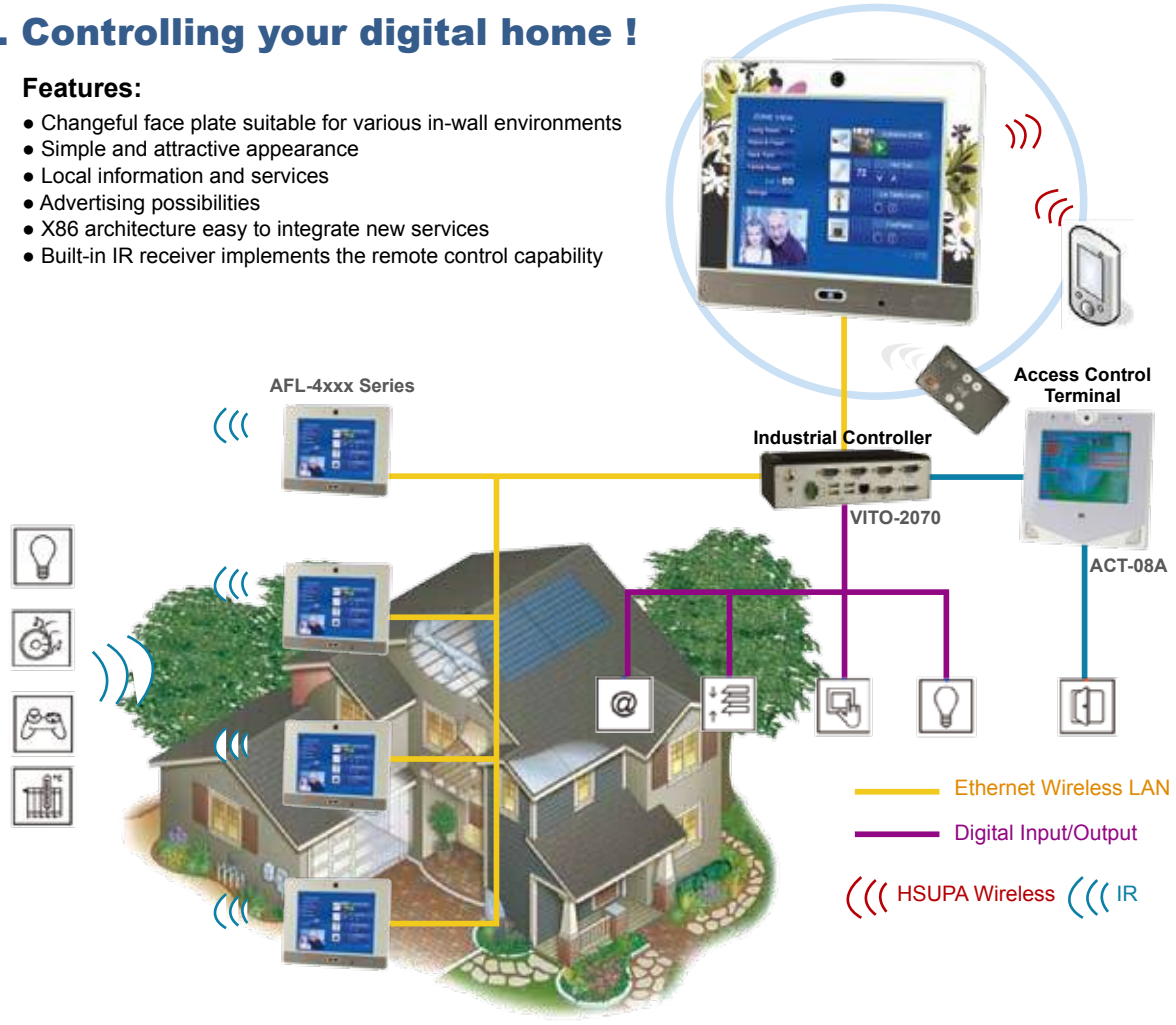


What are we going after ? Various Applications


A. Controlling your digital home !

Features:

- Changeful face plate suitable for various in-wall environments
- Simple and attractive appearance
- Local information and services
- Advertising possibilities
- X86 architecture easy to integrate new services
- Built-in IR receiver implements the remote control capability




Designing a Home Automation System




Audio Control

Telephone announcement and music from one room can follow you down the hall and into the kitchen.




Lighting Control

Lighting set by schedule, time of day.



Security

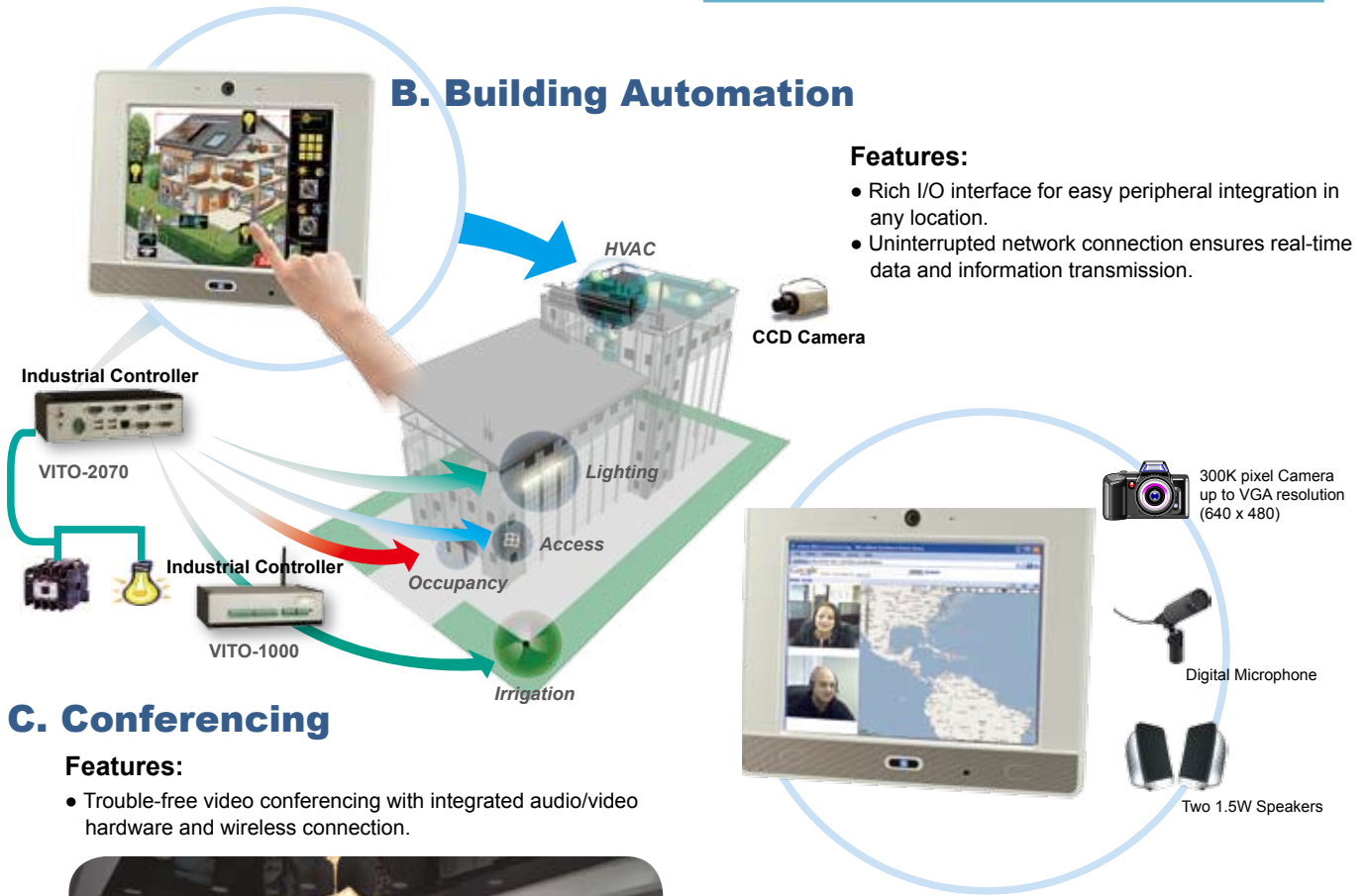
- Control the lighting, in the event of alarm or fire.
- View and record surveillance video



Energy Management

- Lights turn off when leaving the home.
- Settings restore automatically when returning home, saving energy.

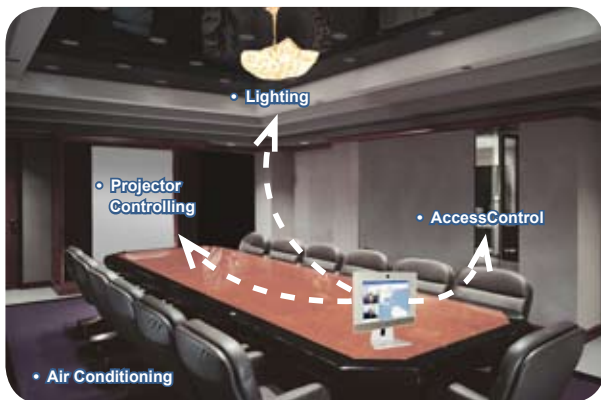
B. Building Automation



C. Conferencing

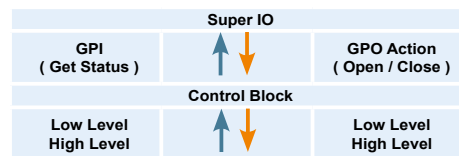
Features:

- Trouble-free video conferencing with integrated audio/video hardware and wireless connection.

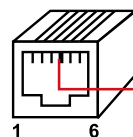
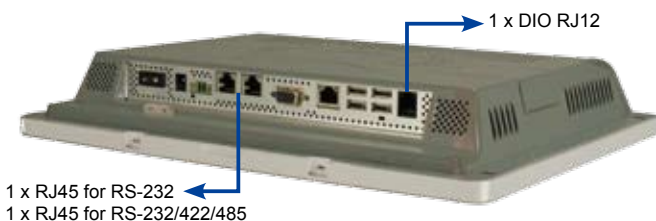


- Equipped with a digital I/O RJ-12 with to remotely control the device on and off.

RJ-12 Digital IO Control Diagram



Pin	Assignment
1	Ground
2	Digital Out Programmable
3	Digital In
4	+12 V
5	NC
6	Ground

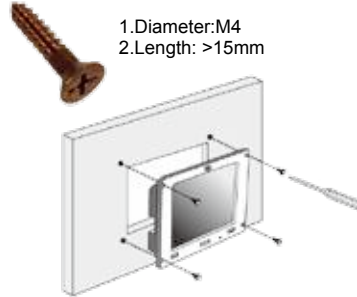


Quick Mounting Technology

• In-wall Mounting



Self-drilling screws



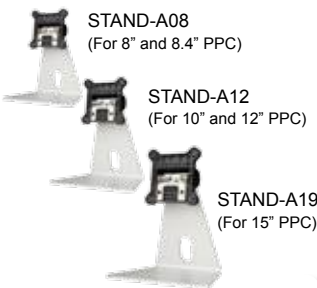
• Wall Mount



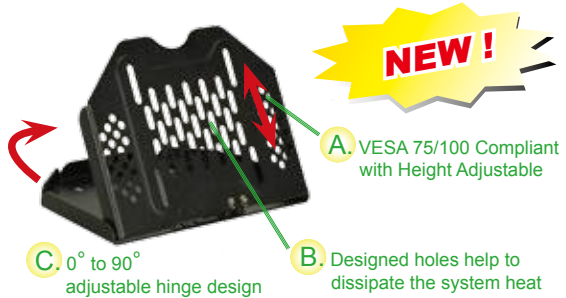
• Desktop Stand



Easy Stand



• V-Stand



Comfortable Stand



Features:

- 0° to 90° adjustable hinge design allows comfortable viewing
- Standard VESA 75/100 Compliance
- Heat dissipation holes designed
- Compact size easy to use and mount anywhere



The Benefits

A. One fits all solution

V-Stand is designed to be compact and tilt adjustable. Provides mobility and ergonomic comfort to fit common wall and ceiling mounting situations.

Wall Mounting



Back office POS system

Ceiling Mounting



Car PC

B. 0° to 90° adjustability

Change the angle of the stand from 0° to 90° to reach almost any point with ergonomic features for comfortable viewing.



POS system

No Hinge Limitation!

C. Space saving and easy to install



1: Tighten the screws in the rear of the AFOLUX PPC VESA mounting holes



2: Select the position to mount stand kit



3: Plug in the system to operate

Compact size provides mobility



AFL-408A-N270

8.4" SVGA Fanless In-Wall Panel PC

AFL-408B-N270

8.0" SVGA Fanless In-Wall Panel PC

AFL-W410A-N270

Wide 10.2" SVGA Fanless In-Wall Panel PC



Features

1. 8" ~ 15" TFT LCD with resistive touch screen.
2. Fanless system with Intel® Atom™ process N270 1.6GHz CPU
3. Changeable faceplate and sticker skin
4. In-wall mechanism design allows easy to installation in minutes
5. Digital I/O RJ-12 port that provides extension for peripherals such as a cash drawer device, lamp, alarms etc.
6. Build-in CMOS camera with digital microphone and two 1.5W speakers for multimedia applications
7. Enabling easier access to the internet through a HSUPA network (Optional)
8. Built-in bluetooth technology rids systems of cables and allows wireless connection to peripheral devices like head phones, keyboard and mouse
9. VESA-mountable for flexibility in mounting and deployment
10. Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing.

Specifications

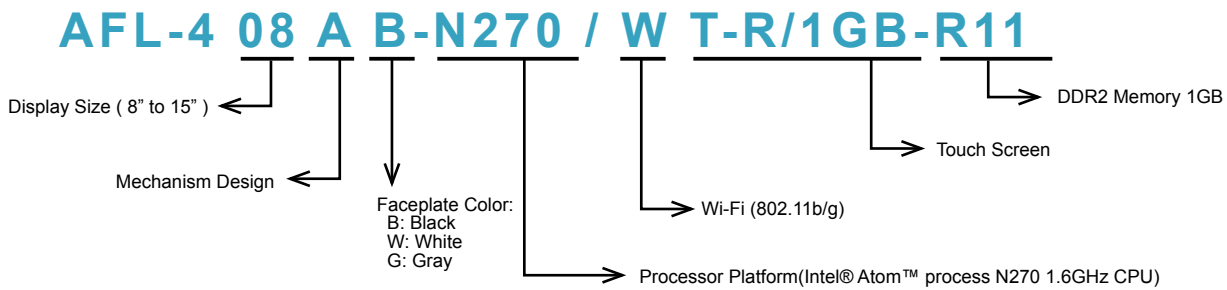


Model		AFL-408A-N270-R11	AFL-408B-N270-R12	AFL-W410A-N270-R11	
Display	LCD Size	8.4"	8.0"	10.2"	
	Max Resolution	800 x 600	800 x 600	1024 x 600	
	Brightness (cd/m ²)	400	250	400	
	Contrast Ratio	400 : 1	500 : 1	400 : 1	
	LCD Color	262K	262K	262K	
	Pixel Pitch (mm)	0.213(H) x 0.213(V)	0.2025(H) x 0.2025(V)	0.2175(H) x 0.2175(V)	
	Viewing Angle (H-V)	120° /100°	140° /130°	140° /110°	
	Backlight MTBF (hrs)	50000	30000	40000	
Motherboard	CPU	Intel® Atom™ process N270 1.6GHz CPU			
	Chipset	Intel® 945GSE + ICH7M			
	RAM	Supports one 200-pin 2GB (Maximum) 400MHz or 533MHz DDRII SO-DIMM			
I/O Ports	1 x RJ-45 for RS232 COM Port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Giga LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power Switch (Inside Front Panel & Rear cover) 1 x Reset Button 1 x RJ12 for Digital Input / Output 1 x Terminal Block for 10~28VDC Input 1 x VGA Port				
	Drive Bay	HDD Drive Bay	N/A		
		SSD	CF Typell		
	Other Features	HSUPA Mobile Solution (Optional)	N/A	N/A	1 x HSUPA Mobile Module (USB Interface)
		Watchdog Timer	Software programmable supports 1~255 sec. System reset		
		Audio	AMP 1.5W + 1.5W		
		Extension	Wireless Lan Module (PCIe Mini Card, 802.11 b/g LAN Module)		
Bluetooth Module (USB Interface V2.0)			N/A		N/A
Webcam & Mic Function	N/A		N/A		
LED Function	1 x Remote Controller (LCD On/Off; System Power On/Off; Volume; Brightness) 1 x Power ON/OFF LED on Front Panel				
Physical	Construction Material	ABS + PC Plastic front frame			
	Mounting	Panel, Wall, VESA 75mm x 75mm/ 100mm x 100mm			
	Front Panel Color	Black/ White/ Gray			
	Net Weight	0.8Kg	0.8Kg	1.5Kg	
Environment	Dimension (WxHxD) (mm)	263.2 x 221.2 x 54.4	263.2 x 221.2 x 54.4	313.83 x 222.13 x 52.5	
	Operation Temperature (°C)	0°C ~50°C	0°C ~50°C	0°C ~50°C	
	Storage Temperature (°C)	-20°C ~60°C	-20°C ~60°C	-20°C ~60°C	
	IP Level	IP64	IP64	IP64	
Touch Screen	EMC	CE, FCC, CCC	CE, FCC, CCC	CE, FCC, CCC	
	Safety	CB	CB	CB	
	Power Adapter	Resistive Type 4-Wire (Touch controller IC is on board)			
Power Requirement	P/N: 63000-FSP0401ADF03A822-RS Power: 40W Input: 90VAC~264VAC, 50/60Hz Output: 12VDC				
	Power Consumption	10 ~ 28V DC-IN 25W	10 ~ 28V DC-IN 25W	10 ~ 28V DC-IN 28W	

AFL-412A-N270**12.1" XGA Fanless In-Wall Panel PC****AFL-415A-N270****15" XGA Fanless In-Wall Panel PC****AFL-415AE-N270****15" XGA Economical Fanless In-Wall Panel PC****Specifications**

Model	AFL-412A-N270-R11	AFL-415A-N270-R11	AFL-415AE-N270-R11	
Display	LCD Size	12.1"	15"	15"
	Max Resolution	1024 x 768	1024 x 768	1024 x 768
	Brightness (cd/m ²)	400	350	250
	Contrast Ratio	500 : 1	700 : 1	600 : 1
	LCD Color	262K	262K	262K
	Pixel Pitch (mm)	0.240(H) x 0.240(V)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)
	Viewing Angle (H-V)	120° /100°	140° /125°	160° /160°
	Backlight MTBF (hrs)	50000	50000	50000
Motherboard	CPU	Intel® Atom™ process N270 1.6GHz CPU		
	Chipset	Intel® 945GSE + ICH7M		
	RAM	Supports one 200-pin 2GB (Maximum) 400MHz or 533MHz DDRII SO-DIMM		
I/O Ports	1 x RJ-45 for RS232 COM Port 1 x RJ-45 for RS-232/422/485 COM port 1 x RJ-45 for Giga LAN 5 x USB 2.0 (4 in the rear, 1 in front panel) 2 x Power Switch (Inside Front Panel & Rear cover) 1 x Reset Button 1 x RJ12 for Digital Input / Output 1 x Terminal Block for 10~28VDC Input 1 x VGA Port			
	HDD Drive Bay	1 x 2.5" SATA HDD bay or Option HSUPA Module		
	SSD	CF Typell		
	HSUPA Mobile Solution (Optional)	1 x HSUPA Mobile Module (USB Interface)		
	Watchdog Timer	Software programmable supports 1~255 sec. System reset		
	Audio	AMP 1.5W+1.5W	AMP 2W+2W	AMP 2W+2W
	Other Features	1 x Wireless Lan Module (PCIe Mini Card, 802.11 b/g LAN Module)		
1 x Bluetooth Module (USB Interface V2.0)				
1 x Webcam & Mic Function				
1 x Power ON/OFF LED on Front Panel				
Physical	Construction Material	ABS + PC Plastic front frame		
	Mounting	Panel, Wall, VESA 75mm x 75mm / 100mm x 100mm		
	Front Panel Color	Black/ White/ Gray		
	Net Weight	1.8Kg	2.8Kg	
	Dimension (WxHxD) (mm)	339 x 276 x 51.6	385.7 x 330.7 x 55.5	
Environment	Operation Temperature (°C)	0°C ~40°C with HDD		0°C ~50°C with CF Card or SATA interface 2.5"SSD HDD
	Storage Temperature (°C)	-20°C ~60°C		
	IP Level	IP64		
	EMC	CE, FCC, CCC		
	Safety	CB		
Touch Screen	Resistive Type 5-Wire (Touch controller IC is on board)			
Power Adapter	P/N: 63000-FSP0481AD101C-RS	P/N: 63000-FSP0601AD101C-746RS		
	Power: 48W	Power: 60W		
	Input: 90VAC~264VAC, 50/60Hz	Input: 90VAC~264VAC, 50/60Hz		
Power Requirement	Output: 12VDC		Output: 12VDC	
Power Consumption	10 ~ 28V DC-IN	32W	49W	10 ~ 28V DC-IN

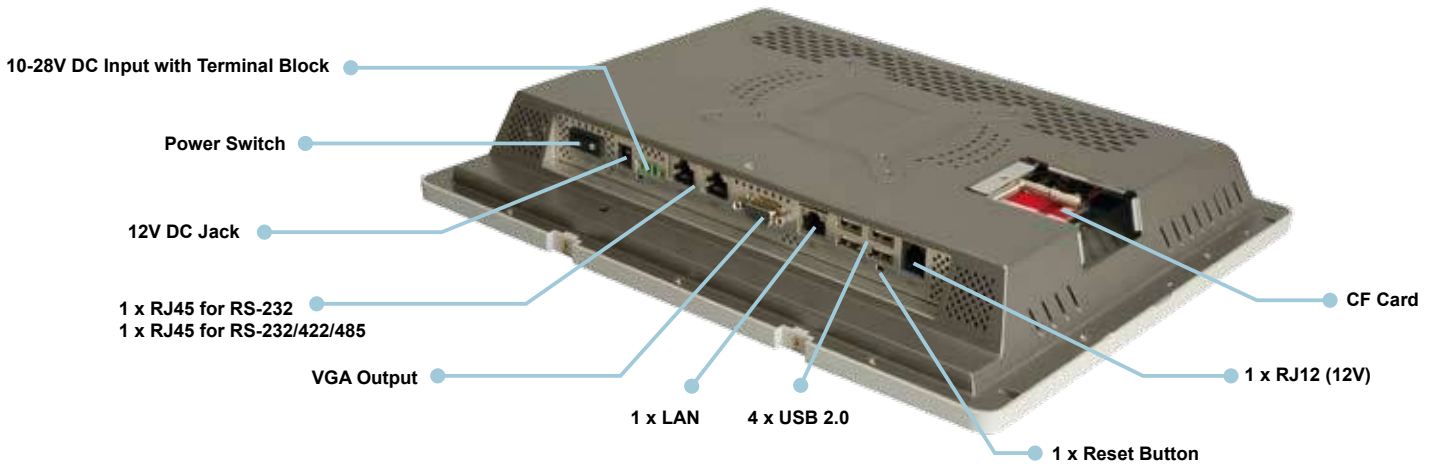
AFL-4xxx In-wall PPC Product Line Naming Rule



Ordering Information

Model	Description
8"	AFL-408BB-N270/WT-R/1GB-R12 8.0" 250 cd/m ² , 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-408BW-N270/WT-R/1GB-R12 8.0" 250 cd/m ² , 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, White Color, R11, RoHS
	AFL-408BG-N270/WT-R/1GB-R12 8.0" 250 cd/m ² , 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Gray Color, R11, RoHS
8.4"	AFL-408AB-N270/WT-R/1GB-R11 8.4" 400 cd/m ² , 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-408AW-N270/WT-R/1GB-R11 8.4" 400 cd/m ² , 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White Color, R11, RoHS
	AFL-408AG-N270/WT-R/1GB-R11 8.4" 400 cd/m ² , 800x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray Color, R11, RoHS
10.2"	AFL-W410AB-N270/WT-R/1GB-R11 10.2" 400 cd/m ² , 1024x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-W410AW-N270/WT-R/1GB-R11 10.2" 400 cd/m ² , 1024x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, White Color, R11, RoHS
	AFL-W410AG-N270/WT-R/1GB-R11 10.2" 400 cd/m ² , 1024x600 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Touch screen and 10-28VDC Wide Range, Gray Color, R11, RoHS
12.1"	AFL-412AB-N270/WT-R/1GB-R11 12.1" 400 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-412AW-N270/WT-R/1GB-R11 12.1" 400 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White color, R11, RoHS
	AFL-412AG-N270/WT-R/1GB-R11 12.1" 400 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray color, R11, RoHS
15"	AFL-415AB-N270/WT-R/1GB-R11 15" 350 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-415AW-N270/WT-R/1GB-R11 15" 350 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White color, R11, RoHS
	AFL-415AG-N270/WT-R/1GB-R11 15" 350 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray color, R11, RoHS
15"	AFL-415AEB-N270/WT-R/1GB-R11 15" 250 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Black color, R11, RoHS
	AFL-415AEW-N270/WT-R/1GB-R11 15" 250 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, White color, R11, RoHS
	AFL-415AEG-N270/WT-R/1GB-R11 15" 250 cd/m ² , 1024x768 fanless In-Wall panel PC with Intel® Atom™ N270 1.6G CPU, 1GB DDR2 RAM, AT/ATX mode, 802.11b/g Wireless, Bluetooth, 300K Pixel Camera W/Microphone, Touch screen and 10-28VDC Wide Range, Gray color, R11, RoHS

Note: Optional 1.3MP Camera with Digital Microphone Module



ISMM Support Functions

	Voltage	Fan	Smart Fan	Temperature	DIO	WDT	Beep	Cash Drawer
AFL-408A-N270	V			V	V	V	V	V
AFL-W410A-N270	V			V	V	V	V	V
AFL-412A-N270	V			V	V	V	V	V
AFL-415A-N270	V			V	V	V	V	V

Options

Model	AFL-408A-N270	AFL-408B-N270	AFL-W410A-N270	AFL-412A-N270	AFL-415A-N270	AFL-415AE-N270
Wall mounting kit	AFLWK-12				AFLWK-19	
ARM	ARM-11-RS / ARM-31-RS					
Stand	STAND-A08 / STAND-100-RS / STAND-150-RS		STAND-A12 / STAND-100-RS / STAND-150-RS		STAND-A19, STAND-B19, STAND-210-RS STAND-A19, STAND-B19, STAND-210-RS	
VSTAND	VSTAND-A10			VSTAND-A12	N/A	N/A
9~30VDC to 12VDC converter module	IDD-930160-KIT				N/A	N/A
OS	OS: Win CE 5.0 (128 MB CF card)	AFLCF-408A-N270-CE-R10	AFLCF-W410-N270-CE	AFLCF-412-N270-CE	AFLCF-415-N270-CE-R10	
	OS: Win CE 6.0 (128 MB CF card)	AFLCF-408A-N270-CE060-R10	AFLCF-W410-N270-CE060	AFLCF-412-N270-CE060	AFLCF-415A-N270-CE060-R10	
	OS: Win XPE (1 GB CF card)	AFLCF-408A-N270-XPE-R10	AFLCF-W410-N270-XPE	AFLCF-412-N270-XPE	AFLCF-415A-N270-XPE-R10	
	OS: Linux (2 GB CF card)	AFLCF-408A-N270-LNX-R10	AFLCF-W410-N270-LNX-R10	AFLCF-412-N270-LNX-R10	AFLCF-415A-N270-LNX-R10	
DC 12V Input UPS	AUPS-A10-R10				AUPS-B10-R10	
DC 9~36V Input UPS	AUPS-A20-R10				AUPS-B20-R10	
Faceplate (Black Color)	AFLFP-408A-B-R10	AFLFP-408B-B-R10	AFLFP-W410A-B-R10	AFLFP-412A-B-R10	AFLFP-415A-B-R10	
Faceplate (White Color)	AFLFP-408A-W-R10	AFLFP-408B-W-R10	AFLFP-W410A-W-R10	AFLFP-412A-W-R10	AFLFP-415A-W-R10	
Faceplate (Gray Color)	AFLFP-408A-G-R10	AFLFP-408B-G-R10	AFLFP-W410A-G-R10	AFLFP-412A-G-R10	AFLFP-415A-G-R10	
In-Wall Cage (Options)	AFLIWC-408-R10	AFLIWC-408-R10	AFLIWC-W410-R10	AFLIWC-412-R10	AFLIWC-415-R10	AFLIWC-415-R10

Note: Win CE application without digital microphone function

Removable Faceplate: AFLFP-4xxx-G-R10 AFLFP-4xxx-W-R10 AFLFP-4xxx-B-R10



Packing List

Item	P/N	Q'ty	Specifications
Screws	44233-030081-RS	4	M3; φ8mm
Power Adapter	63000-FSP0481AD101C-RS	1	90 ~ 264V 12v; 48W
Power Cable	32000-000002-RS	1	1750mm, European Standard
User's Manual CD ROM	7B000-000087-RS	1	
Touch Pen	XTR104-0002-RS	1	
Remote Control Unit	72000-8T00320ICP05G-RS	1	

In-Wall Cage

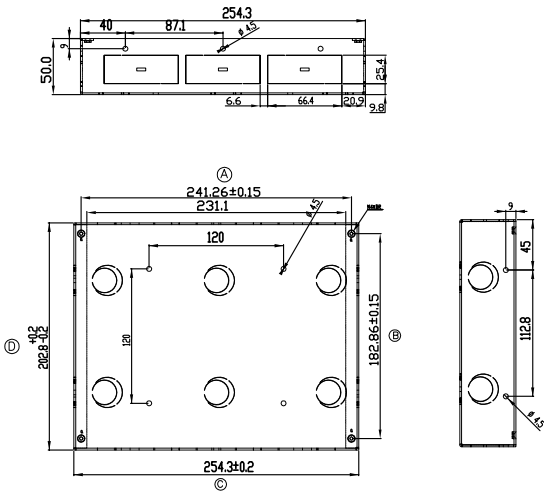
Electrical Knockouts of Wall Cage



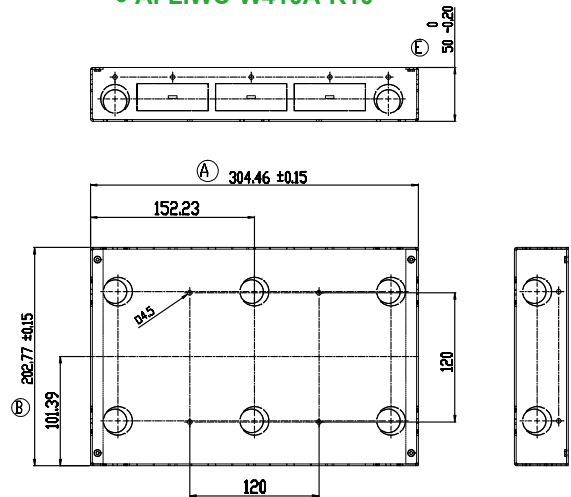
Remove appropriate electrical conduit knockouts prior to installation of the cage.



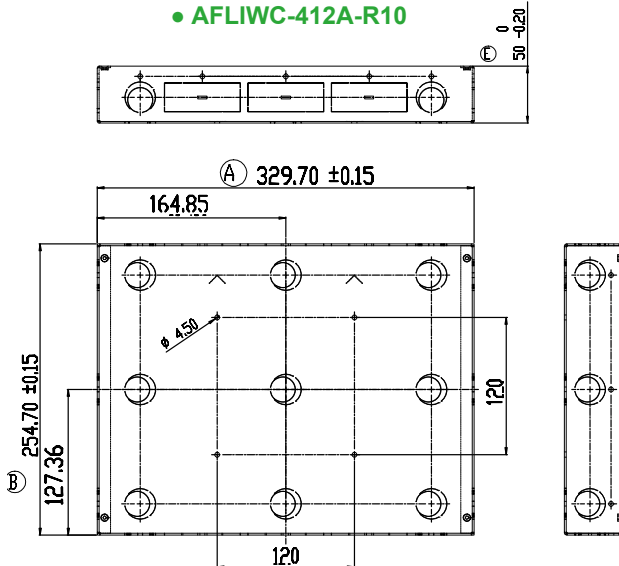
• AFLIWC-408A/B-R10



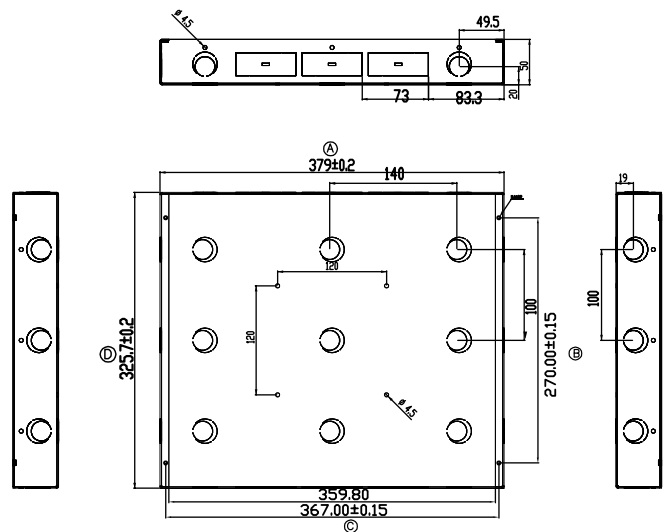
• AFLIWC-W410A-R10



• AFLIWC-412A-R10

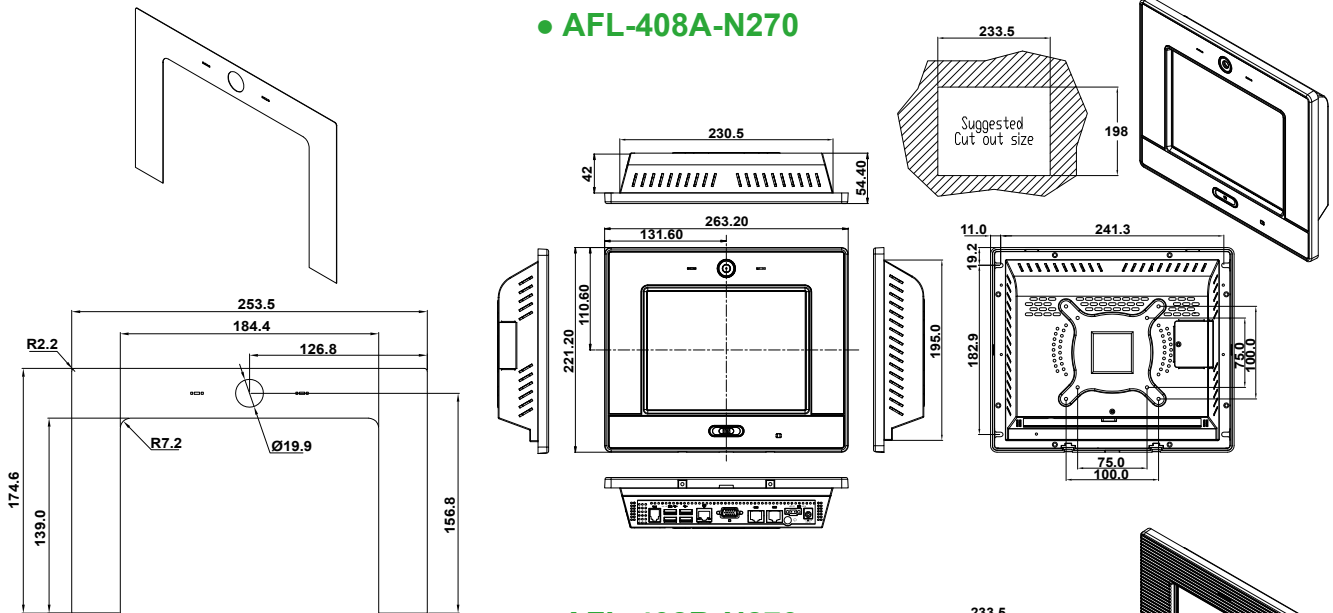


• AFLIWC-415A-R10

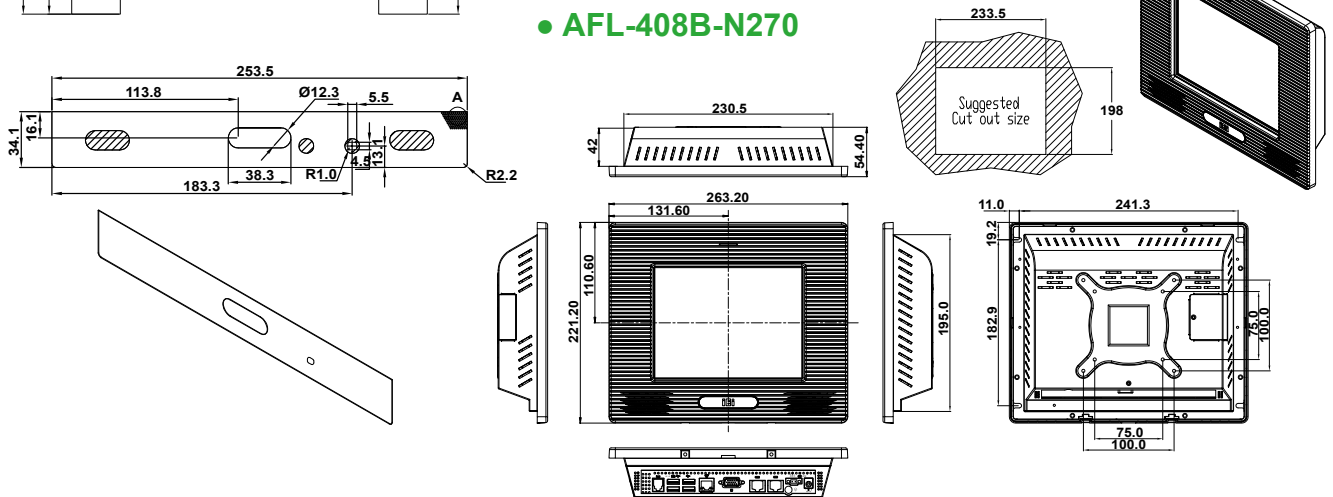


Dimensions

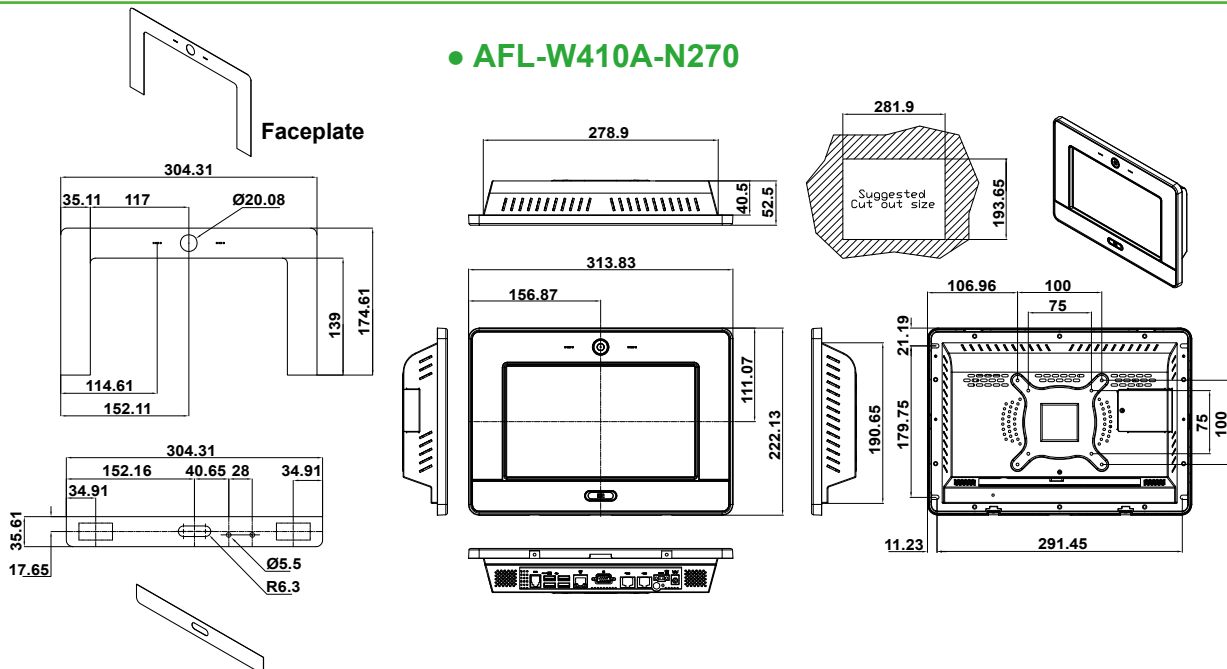
• AFL-408A-N270



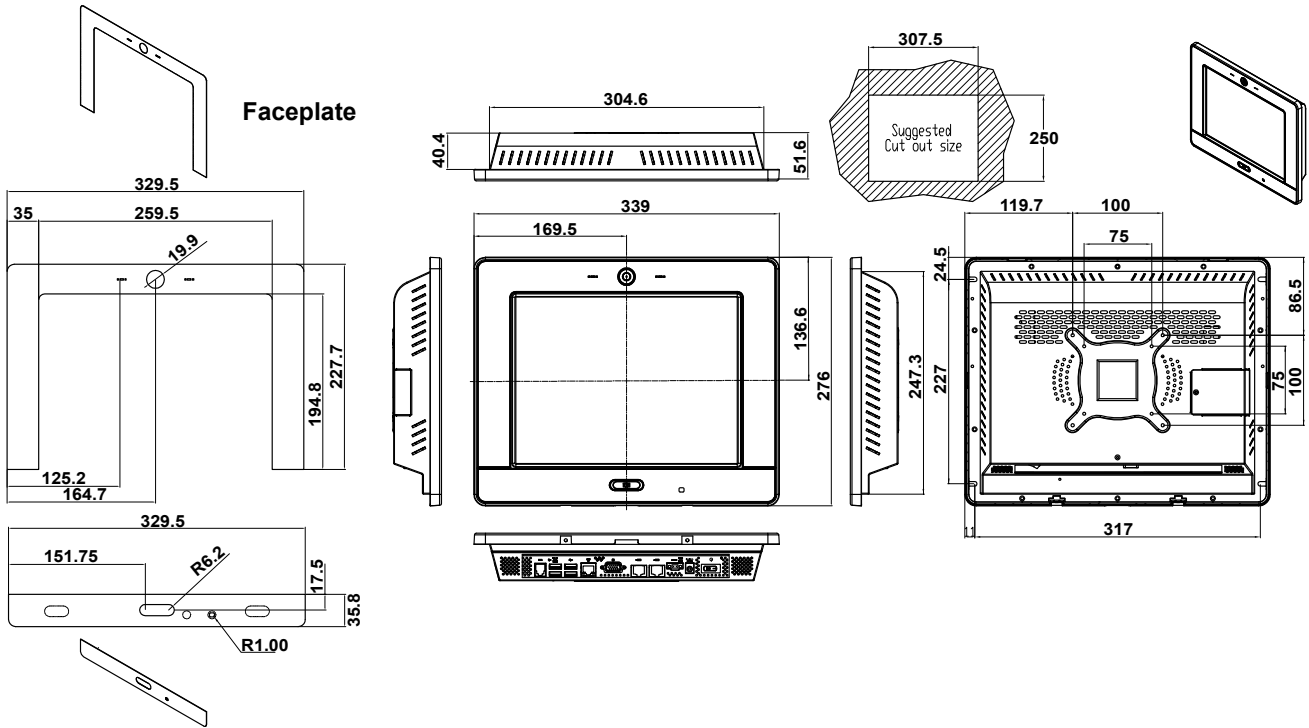
• AFL-408B-N270



• AFL-W410A-N270



• AFL-412A-N270



• AFL-415A-N270/AFL-415AE-N270

