WIDS-515A/9455
WIDS-517A/9455

Core™2 Duo / Celeron® D Panel PC with 15" and 17" TFT LCD and Touchscreen

WiFi antenna

WiFi Advanced Model

2 x Waterproof USB
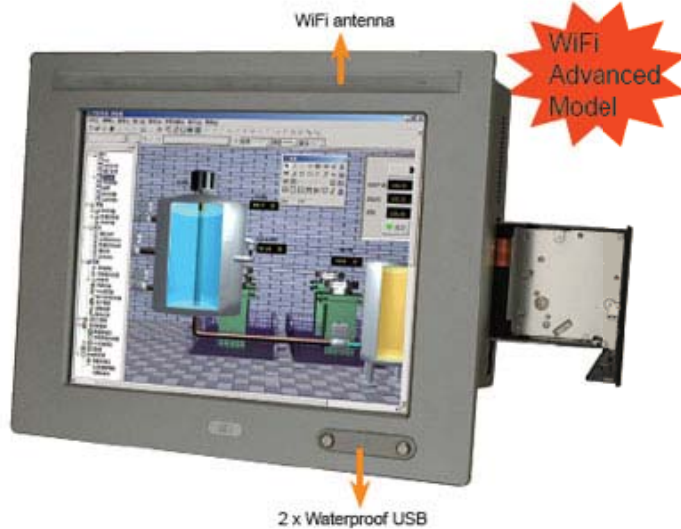
Features

- LGA 775 Intel® Core™2 Duo / Celeron® D FSB 533/800/1066 MHz processor
- Supports two 2.0 GB (max.) 667 MHz DDR2 DIMM
- Dual Gigabit Ethernet support
- Built-in invisible WiFi module supports 802.11 a/b/g/n
- Additional PCI expansion slot capacity (Optional PCIe x4 slot with PCIe x1 expansion slot capacity)
- Lockable power connector to ensure secure power cable connection
- Easily accessible external AT/ATX mode selection switch
- External CMOS reset button for fast system recovery
- One Compact Flash® Type II socket
- IP 65 compliant aluminum front panel

The WIDS series featuring high speed WiFi IEEE 802.11 n protocol which builds on previous 802.11 standards by adding multiple-input multiple-output (MIMO) and 40 MHz operation to the physical (PHY) layer. MIMO uses multiple transmitter and receiver antennas to improve the system performance. The 40 MHz operation uses wider bands, compared to 20 MHz bands in previous 802.11 operation, to support higher data rates. Wider bandwidth channels are cost effective and easily accomplished with moderate increases in digital signal processing.

▶ Solid IP 65 Wi-Fi PPC WIDS (Wireless Industrial Display Station)
▷ WiFi 802.11 a /b/g/n WLAN Networking

27 times faster data transfer rate compare 802.11b

802.11 a/b/g/n ready with invisible antenna

Protocol 802.11	Freq. (GHz)	Thru. (Mbit/s)	Data (Mbit/s)	Range indoor (m)	Range outdoor (m)
a	5 GHz	23	54 Mbit/s	~35	~120
b	2.4 GHz	4.3	11 Mbit/s	~38	~140
g	2.4 GHz	19	54 Mbit/s	~38	~140
n	5 GHz and/or 2.4 GHz	74	300 Mbit/s (2 streams)	~70	~250

▷ IP 65 Security Front USB Port

Designed for industrial use, WIDS waterproof front USB cover is based around the standard USB interface, with USB Ver.2 performance offering data transfer up to 480Mbs.

Front USB function switch allow user choose enable or disable the front USB port function. Depends on application and security demands, the system administrator can easily make decision to release the front USB port or not.

USB Switch

△TOP

▷ One 32-bit PCI slot for further function upgrading
(Optional PCIe x4 with PCIe x1 expansion slot capacity)

32-bit PCI slot for future expansion
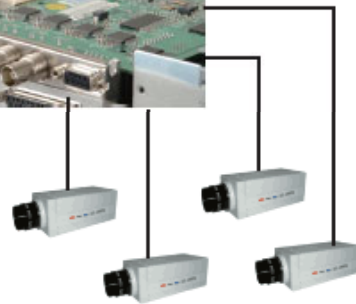
Expansion for variousPCI add-on card

15" and 17" TFT-LCD Big Screen for more multi-task Viewing

WIDS equips with 15" and 17" TFT LCD which is a ideal design for the multi-display requirement such as digital surveillance or multioperating- system. With multi-display configuration, users can handle more tasks at the same time as well as saving the resource and space.

▷ User-Friendly Interface

A. User-accessible CF
PPC has a CF slot on the bottom panel making installing and replacing CF cards easy.

B. Securing Your CF Card
A security door on the PPC protects the CF card from being stolen in public places.

C. Lockable Power Cord
Power plug lock keeps power cable securely in place.

D. CMOS Reset button

The CMOS reset button forces the BIOS to be reset to its default values for the following reasons:
--Fast BIOs updating --Hard device conflicts slows down or disrupts system operation

E. AT/ATX mode switch

Easily select the AT or ATX power mode with an easily accessed switch.

▶ Upgrading Features

▷ Feature 1: New DDR2 performance !

• **New Memory Architecture**

This new design includes wider internal data buses that support dual-channel DDR2 memory technology at 667 MHz (up to 10.7 GB/s of peak memory bandwidth) for greater platform performance and memory flexibility.

DDR-Slot: 184 Pins, 2.5 V

DDR2 Slot: 240 Pins, 1.8 V

DDR V.S. DDR2 Comparison

Items	DDR2 SDRAM	DDR SDRAM	SDRAM
Clock frequency	200/266/333/400 MHz	100/133/166/200 MHz	100/133/166 MHz
Transfer data rate	400/533/667/800Mbps	200/266/333/400Mbps	100/133/166 Mbps
I/O width	×4/ ×8/ ×16	×4/ ×8/ ×16/ ×32	×16/ ×32
Prefetch bit width	4 bits	2 bits	1 bit
Clock input	Differential clock	Differential clock	Single clock
Burst length	4, 8	2, 4, 8	1, 2, 4, 8, full page
Datastrobe	Differential data strobe	Single data strobe	Unsupported
Supply voltage	1.8V	2.5V	3.3V/2.5V
Interface	SSTL_1.8	SSTL_2	LVTTL
CAS latency (CL)	3, 4, 5 clock	2, 2.5, 3 clock	2, 3 clock
Read latency	AL+CL	CL	CL
Write latency	(AL+CL).1	1	0
Additive latency (AL)	0, 1, 2, 3, 4clock	Unsupported	Unsupported
Off-chip driver (OCD)	Support	Unsupported	Unsupported
On die termination (ODT)	Support	Unsupported	Unsupported
Component package	FBGA	TSOP(II)/ FBGA/ LQFP	TSOP(II)/ FBGA
Lead-free	Support	Support	Support

▷ Feature 2: SATAII with double transfer rate !

• **Intel® Graphics Media Accelerator 950**

Intel GMA 950 improved the performance of Microsoft DirectX9.0 3D, which allows better video playback and quality. Combined with the Intel high-performance dual-channel memory interface, Intel GMA 950 can deliver significant graphics performance on the previous Intel platforms and dual independent display.

• **Intel® I/O Controller Hub (Intel® ICH7)**

The Intel 945G Express Chipset elevates storage performance with next generation Serial ATA (SATA). This chipset has four integrated SATA II ports of transferring rates up to 3 Gb/s (300 MB/s) to SATAII hard drives or optical devices.

▷ Feature 3: Dual Gigabit Ethernet Redundancy

Two separate LAN ports that can be connected to separate LAN networks. Dual LAN redundancy involves setting up two separate physical networks . If one of the networks fails, the PC host will still be able to communicate with your serial devices over the other LAN.

▶ General Features

	Dual Display		IP 65 Front Panel Compliance
	IEI industrial PPC series with dual screen technology by VGA port, suitable for industrial applications, enables one screen be used for operator entries, while other is used as display unit for process data.		Industrial-grade dustproof protection. Screen's water-jet protection. Water projected by a nozzle against enclosure from any direction shall have no harmful effects.
	Touch Screen		**Super Connectivity**
	• 5-wire resistive touch screen as standard device • High resistance to abrasion, high optical transmission • Maintains a clear and highly-sensitive response after being touched by fingers or any other objects • Any point can be touched up to 10 million times and still withstand the standard falling and vibration test.		• Multi-port RS-232/422/485 • USB 2.0 interface supports latest peripherals and USB 1.1 is compatible as well • Extended audio functions: Mic-in/Line-in/Line-out • Dual LAN legacy • CF card slot on the rear for easy installation
	Wi-Fi 802.11 a/b/g/n Connection		**Expansion Capability**
	Conserves wiring material cost		PCI slot for flexible, scalable specification expansion (Optional PCIe x4 with PCIe x1 expansion slot capacity)
	VESA Arm/Wall mounting solution		**Screen Rotation**
	Complied with VESA 100 Standard Mounting Hole Depending on various service spaces, you can pair with various types of movable arms and secure them in any space. You may move and place them according to your needs and make the best use in a limited space.		It's integrated in the Intel windows drivers and could be easily adjusted by GUI or hot keys. Collocating with rotational VESA mount arms, user can switch the screen status to feet needed anytime, or even more, combine dual independent display function to get more convenience.

▶ Industrial Grade Compliance

▷ IP 65 dustproof and waterproof front panel

The PPC series front panel is IP 65 compliant. IP 65

compliance guarantees the front panel is dustproof and water-proof. The PPC series front panel can withstand any industrial environment where dust and drizzle is encountered.

▷ Advanced Anti-shock Protection

Anti-shock design enhances protection performance of hard drives dramatically in terms of shock and vibration tests.

▷ Anti-vibration protection

The panel PC is equipped with a drive kit to increase the resistance of the hard drive to side shocks and vibrations. The drive kit extends the drive life cycle in environments such as vehicles and marine applications.

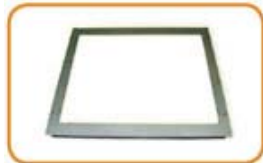## ▷ IQ Mount

- **Panel Mount**

IEI Panel mount allows customers mount IEI LCD products on the panel kit with IP 65 water proof feature.

- **Wall Mount**

IEI wall mount kit allows LCD products quick release and mount on the wall. It makes LCD products quick installation and easy maintenance solution.

- **Rack Mount**

Rack-mountable equipment is mounted simply by bolting its front panel to the rack, with a square-holed rack by clipping or some other variation on the theme.

- **ADesk Top Stand and Adjustable ARM**

Adjustable stand kit allow users to work in comfort, reducing neck and back strain from improperly positioned screens and easily movable to anywhere. Adjustable monitor arms could be easily mounted on the wall, ceiling, and desk.
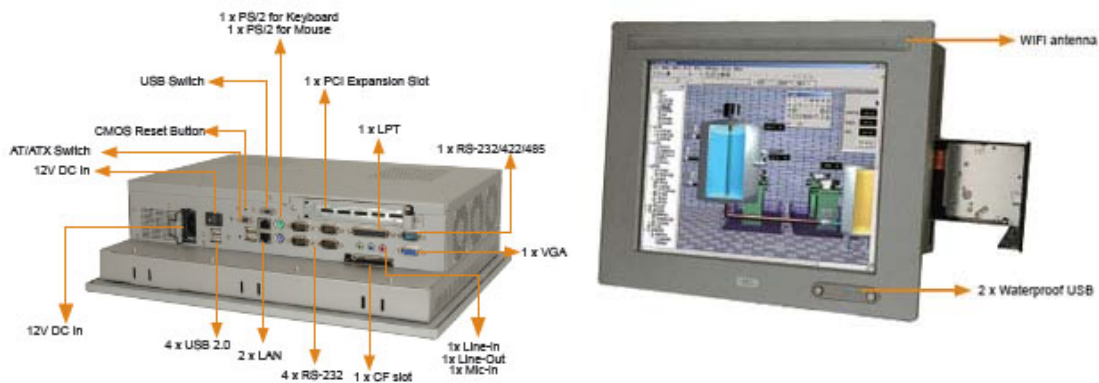
△TOP

▷ Specifications

Model	WIDS-515A / 9455	WIDS-517A / 9455
LCD	Resolution :1024x768 (XGA) Brightness : 350 cd/m² Contrast Ratio : 700:1 Viewing Angle (H-V):140/125 Backlight MTBF : 50,000 hrs	Resolution :1280x1024 (SXGA) Brightness : 300 cd/m² Contrast Ratio : 800:1 Viewing Angle (H-V):140/140 Backlight MTBF : 50,000 hrs
CPU	LGA 775 Intel® Core™2 Duo / Celeron® D with a 533/800/ 1066 MHz FSB	
Chipset	Intel® 945G + ICH7R	
Memory	2 x 2 GB (max.) DDR2 667 MHz DIMM (system max. 4 GB)	
VGA	Intel® 945G supports dual display	
SSD	One CF Type II socket	
Drive Bay	1 x 2.5" SATA II HDD bays with anti-shock	
	1 x Slim Type CD-ROM bay	
Ethernet	2 x PCIe GbE controllers	
Audio	HD Audio Codec with Realtek ALC883	
I/O	1 x RS-232/422/485 4 x RS-232 6 x USB 2.0 (2 waterproof USB in the front of the panel) 2 x PS/2 (KB/MS) 1 x LPT 1 x VGA out	2 x LAN 3 x Audio (Lin-in, Line-out,MIC-in) 1 x CMOS reset button 1 x AT/ATX switch 1 x USB switch
Expansion Slot	One PCI, One Mini-PCIe (for Wireless module), One PCIe x4 with PCIe x1 signal (Optional)	
Touch Screen	5-wire resistive type with RS-232 interface	
Operating Temperature	0°C~ 50°C	
Storage Temperature	-20°C ~ 60°C	
Vibration	-5~17Hz 0.1" double amplitude displacement, 17~640 Hz 1.5G acceleration peak to peak	
Shock	10G acceleration peak to peak. (11 ms)	
Relative Humidity	5%~ 95% @ 60°C, non-condensing	
Net / Gross Weight	7 kg /11 kg	8 kg / 12 kg
Dimensions (W x H x D)	410 mm x 329 mm x 124.5 mm	451.98 mm x 375.96 mm x 123 mm
Power Supply / ATX AC-Input	AC Input ATX Power Supply 180W, ACE-A618A-RS - Input: 90 ~ 264VAC @ 50/60Hz - Output (max.) : 3.3V@14A, 5V@16A, 12V@14A, -12V@0.5A	AC Input ATX Power Supply 220W, ACE-A622A-RS - Input: 90 ~ 264VAC @ 50/60Hz - Output (max.) : 3.3V@14A, 5V@16A, 12V@10A,- 12V@0.8A
Power Supply / ATX DC-Input	DC Input ATX Power Supply- 200W, ACE-4520C-RS- Input: 24VDC @ 50/60Hz- Output (max.) : 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A	
Front Panel Protection	IP 65 compliant	
Certificate	Meets CE, FCC	

△TOP

▶ Fully I/O Support
• PPC-515A / PPC-517A

△TOP

▶ Dimensions
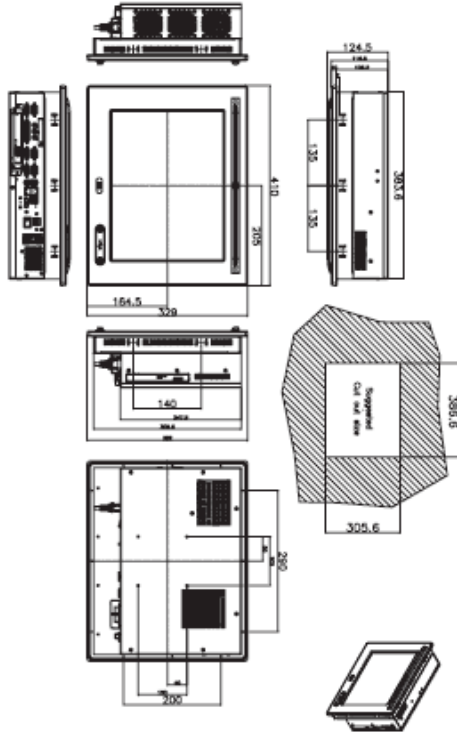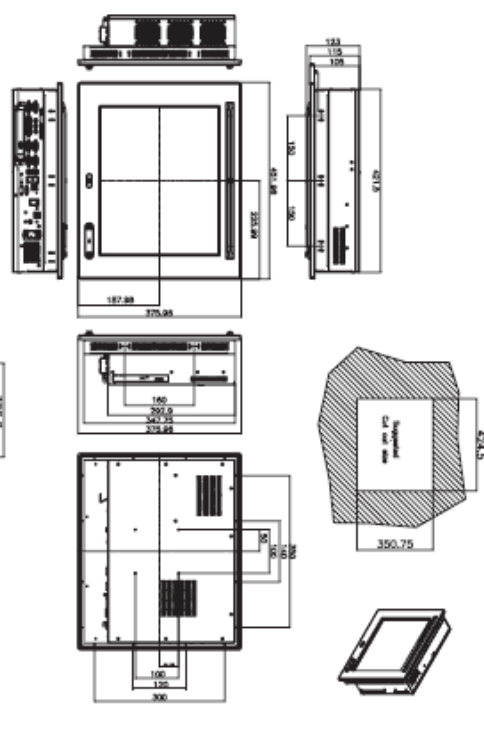
▲TOP

▶ IQ Mounting Options

LCD Size	15" Panel PC	17" Panel PC
Panel Mount Kit	PK-170M	
Wall Mount Kit	WK-190MS-R10	
Rack Mount Kits	RK-150MS-R10	RK-170MS-R10
Stand	STAND-210-RS	
ARM	ARM-31-RS	

▲TOP

▶ Packing List

Part Number	Description	Amount
19600-000078-RS	Screw Kit	1
PK-170M	Panel Mounting Kit	1
WK-190MS-R10	Wall Mounting Kit	1
32000-000002-RS	Power Cord	1
33100-000079-RS	Jumper Pack	1
	User Manual & Driver CD	1

▲TOP

▶ Options

Part Number	Description
19Z00-00011 2-RS	IDE CD-ROM Installation Kit (W/O IDE Cable)
32200-000045-RS	40cm CD-ROM IDE Cable
41019-0393C0-00-RS	IDE HDD Bracket
32200-000037-RS	25cm HDD IDE Cable
134D270-00-102-RS	PCIe x4 slot with PCIe x1 Signal Riser Card

▲TOP

▶ Ordering Information

15" XGA Touch Panel PC

AC	WIDS-515A/9455-E2160/A618A/WT-R/1GB	15" 350 cd/m² XGA Panel PC with POS-9455,Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 a/b/g/n wireless module, Silver color,PSU ACE-A618A, touch screen, RoHS
DC	WIDS-515A/9455-E2160/4520C/WT-R/1GB	15" 350 cd/m² XGA Panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 a/b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS

17" SXGA Touch Panel PC

AC	WIDS-517A/9455-E2160/A622A/WT-R/1GB	17" 300 cd/m² SXGA panel PC with POS-9455,Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 a/b/g/n wireless module, Silver color,PSU ACE-A622A, touch screen, RoHS
DC	WIDS-517A/9455-E2160/4520C/WT-R/1GB	17" 300 cd/m² SXGA panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 a/b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS

▲TOP