

# WSTRIDER-200A-US15WP

IP67 Extend-Temperature  
Fanless Embedded Controller



## Features

- ♦ Ultra low voltage Intel® Atom™ Z510PT solution
- ♦ IP67 compliant rugged design
- ♦ Fanless operation under -30°C ~70°C extreme temperature
- ♦ Built-in 802.11b/g/n high speed wireless communication
- ♦ 9~28VDC power input
- ♦ Two channels analog video input
- ♦ Built-in 4G industrial grade high speed CompactFlash®
- ♦ IEI One Key Recovery solution allows you to create rapid OS backup and recovery



WStrider-200A is a rugged embedded controller designed to operate in harsh usage environments and conditions. Its Aluminum die-casting enclosure and M12 watertight connector not only provides IP67 grade protection against dust and water, it also can withstand high impact by vandal usage. Empowered by Intel® Atom™ Z510PT with US15WPT industrial grade processor and chipset, WStrider-200A is able to operate under extreme temperature from -30°C to 70 °C. The built-in 802.11b/g/n module with IP67 compliant external antenna provides reliable high speed wireless communication. Furthermore WStrider-200A is capable of taking video input or image from analog camera by its built-in Techwell TW6805, providing upto two channels video capturing. For severe environment with unstable power source, WStrider-200A can take power input from 9VDC to 28VDC.



## Rugged IP67 Protection

The IP Code (International Protection Rating) is defined in international standard IEC 60529 and it classifies the degrees of protection provided against the intrusion of solid objects, dust, accidental contact, and water in electrical enclosures. WStrider-200A is a IP67 compliant controller and this dust-tight, water ingress resistant design has been verified severely throughout the design process in IEI's in-house UL50 certified waterproof laboratory. Air leak examination will also be applied during production to ensure every WStrider-200A is ready to operate reliably in harsh environment.

### Air Leak Examination



### Immersion test



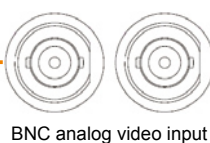
### [ IP67 ] Dust-tight

Level	Effective Against
6	No ingress of dust; complete protection against contact

### [ IP67 ] 30 minutes immersion under one meter water

Level	Effective Against
7	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1m of submersion)

## Analog Video Input



BNC analog video input



Water proof BNC cable



IP67 analog camera



IP67 external wireless antenna

WStrider-200A offers two channels analog video input via BNC interface with IP67 protection. By built-in Techwell TW6805 video engine, WStrider-200A can support upto D1 resolution capturing. For mining or disaster rescuing application, live video image is necessary for control and decision making, WStrider-200A can encode video and picture data then instantly transfer it to remote monitoring center via GbE or 802.11b/g/n high speed wireless communication.

## Wide Range DC Input

For severe environment with unstable power source, WStrider-200A can takes power input from 9VDC to 28VDC. WStrider-200A uses 5-pin M12 connector as power input interface, which has different pin numbers to avoid power mistakenly connected to other IO for safety concern. You may apply DC power source directly to WStrider-200A via M12 5pin to terminal block cable in packing, or with optional IP67 60W power adaptor, apply AC source from the field.

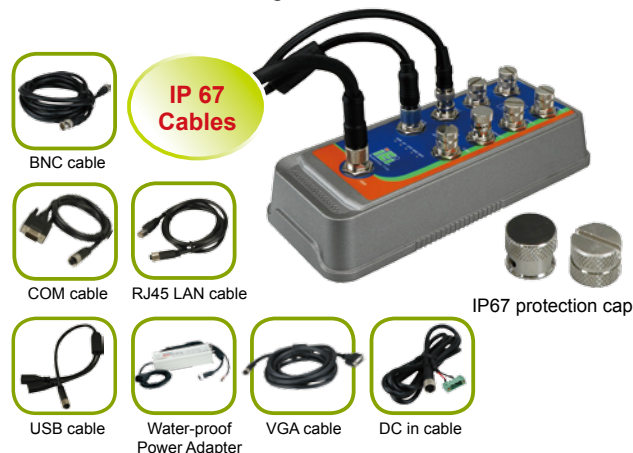
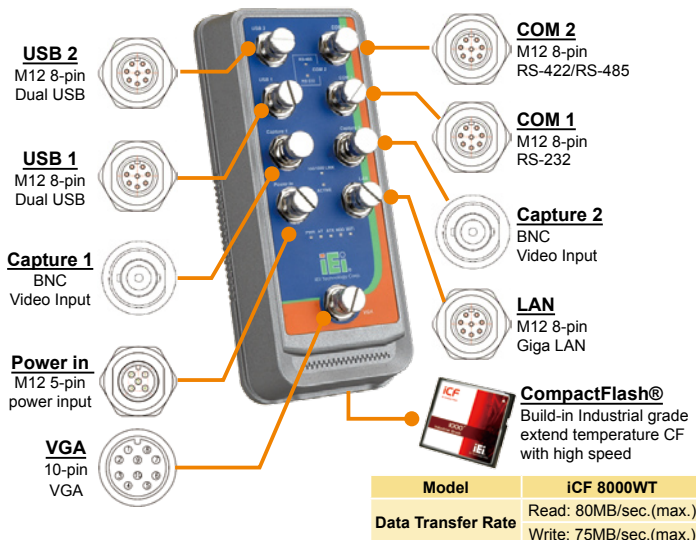
## IO Interface & Cabling

WStrider-200A uses IP67 compliant M12 and BNC connectors with watertight cap in pair for each connector. With watertight-to-PC interface cables, WStrider-200A can be easily connected to PC peripheral devices, operating just like common PC.



terminal block  
DC in cable

IP67 60W water-proof  
Power Adapter



## Specifications

Model Name		Wstrider-200
Platform		Intel®
Chassis	Color	Cool Gray
	Dimensions	99 x 61.7 x 230mm
	Chassis Construction	Aluminum Alloy with heavy duty metal
Motherboard	Processor CPU	Intel® Atom™ Z510PT 1.1GHz
	Chipset	Intel® US15WPT
	System Memory	1GB DDR2 onboard memory
Storage	CompactFlash®	pre-install 4GB
	USB 2.0	4
System Function	Ethernet	1 x Intel® 82541PI PCI GbE
	RS-232	1
	RS-232/422/485	One RS-232/422/485 Default RS422 with isolation
	Display	1
	Resolution	1600 x 1200 @ 60Hz
	Wireless	1 x 802.11b/g/n
	Video Capturing	2
Power	Expansion	One PCIe Mini Card Slot (reserve for wifi module)
	Power Input	9 ~ 28V DC
	Power Consumption	12@1.10A (Intel® Z510PT 1.1G GHz, DDR2 1GB)
Reliability	Mounting	VESA 75/100 mount, wall mount
	Operating Temperature	-30°C ~ 70°C with CompactFlash®
	IP 67	Yes
	Operating Vibration	*MIL-STD-810F 514.5C-2
	Weight (Net/Gross)	1.3kg/2.9kg
Certification	EMC/Safety	CE, FCC class A, UL, CB

\*The system that with Hard drive can meet the Standard testing MIL-STD-810F 514.5C-1. and with SSD/CF can meet MIL-STD-810F 514.5C-2

## Ordering Information

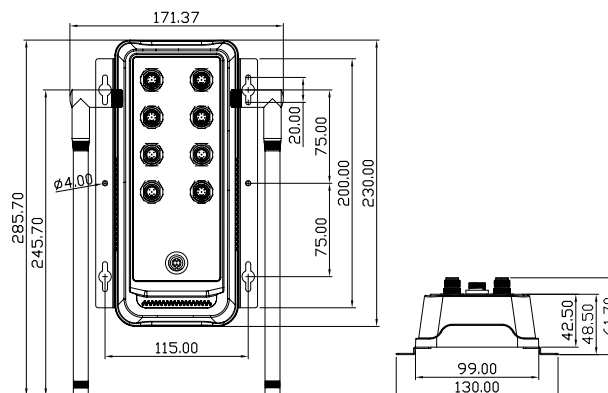
Part No.	Description
WSTRIDER-200A-R10/4G-XPE	IP 67 extend temperature fanless embedded system, US15WPT with Intel® Atom™ 1.1GHz Z510PT processor, 1GB DDR2 memory onboard, w/ 4GB CF card, built in Windows XP embedded OS, w/o power adaptor, -30°C ~ 70°C, RoHS
WSTRIDER-200AW-R10/4G-XPE	IP 67 extend temperature fanless embedded system, US15WPT with Intel® Atom™ 1.1GHz Z510PT processor, 1GB DDR2 memory onboard, 802.11b/g/n wireless, w/ 4GB CF card, built in Windows XP embedded OS, w/o power adaptor, -30°C ~ 50°C, RoHS
WSTRIDER-200A-R10/4G	IP 67 extend temperature fanless embedded system, US15WPT with Intel® Atom™ 1.1GHz Z510PT processor, 1GB DDR2 memory onboard, w/ 4GB CF card, w/o OS, w/o power adaptor, -30°C ~ 70°C, RoHS
WSTRIDER-200AW-R10/4G	IP 67 extend temperature fanless embedded system, US15WPT with Intel® Atom™ 1.1GHz Z510PT processor, 1GB DDR2 memory onboard, 802.11b/g/n wireless, w/ 4GB CF card, w/o OS, w/o power adaptor, -30°C ~ 50°C, RoHS
VK-WSTRIDER-200A-R10	VESA mount kit for WStrider-200, silver, RoHS

\* For other CompactFlash® capacity, please contact with IEI for customization.

## Optional Cables and Adapter

Item	Part Number
Water-proof Power Adapter (12V 60W)	63000-CLG6012IE-RS
Water-proof Power cable 14AWG (200 cm)	32002-001300-100-RS
Water-proof COM port cable (300 cm)	32005-000100-100-RS
Water-proof USB cable (300 cm)	32001-001000-100-RS
Water-proof LAN cable (300 cm)	32013-000200-100-RS
Water-proof BNC male cable (300 cm)	32014-000100-100-RS
Water-proof VGA cable (320 cm)	32003-000100-100-RS

## Dimensions (Unit: mm)



## Packing List

1 x QIG	2 x wall mount bracket
1 x Driver CD	2 x IP67 wireless antenna*
1 x Screw set	(*for wireless model only)