

Horizon Series

The **ESTeem Horizon** is a ruggedized, industrial wireless device built to be an essential component of the burgeoning industrial communications infrastructure. The **ESTeem Horizon** provides unsurpassed speed and range to deliver the reliable, isolated and secure wireless networks required today to provide complete connectivity to critical IT, operations control systems and remote asset data. Scalable Wireless networking over large geographical areas become a reality using the Horizon **IndustrialMESH** technology.



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Key Features

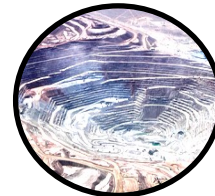
- ESTeem's scalable **IndustrialMESH** technology enables redundant, self-healing networks to provide dependable and stable communications in extreme environmental conditions.
- ESTeem's exclusive **Dual Wi-Bridge** mode enables two isolated wireless bridged networks to run side-by-side, delivering two independent networks that seamlessly flow across a common wireless infrastructure for secure and segmented networking.
- Same device can be used for master, repeater and remote locations enabling superior network flexibility and scalability
- Private and Secure Communications
- High-speed connectivity to provide bandwidth for your network data, control and video applications
- Ethernet and serial communications
- Simplified configuration
- ESTeem Memory Module stores configuration information for rapid deployment or replacement
- *Optional GPS Module* for location tracking
- *ESTeem 195E Series compatible*



Water/Wastewater



Oil & Gas



Mining



Power & Energy



Material Handling



Factory Floor

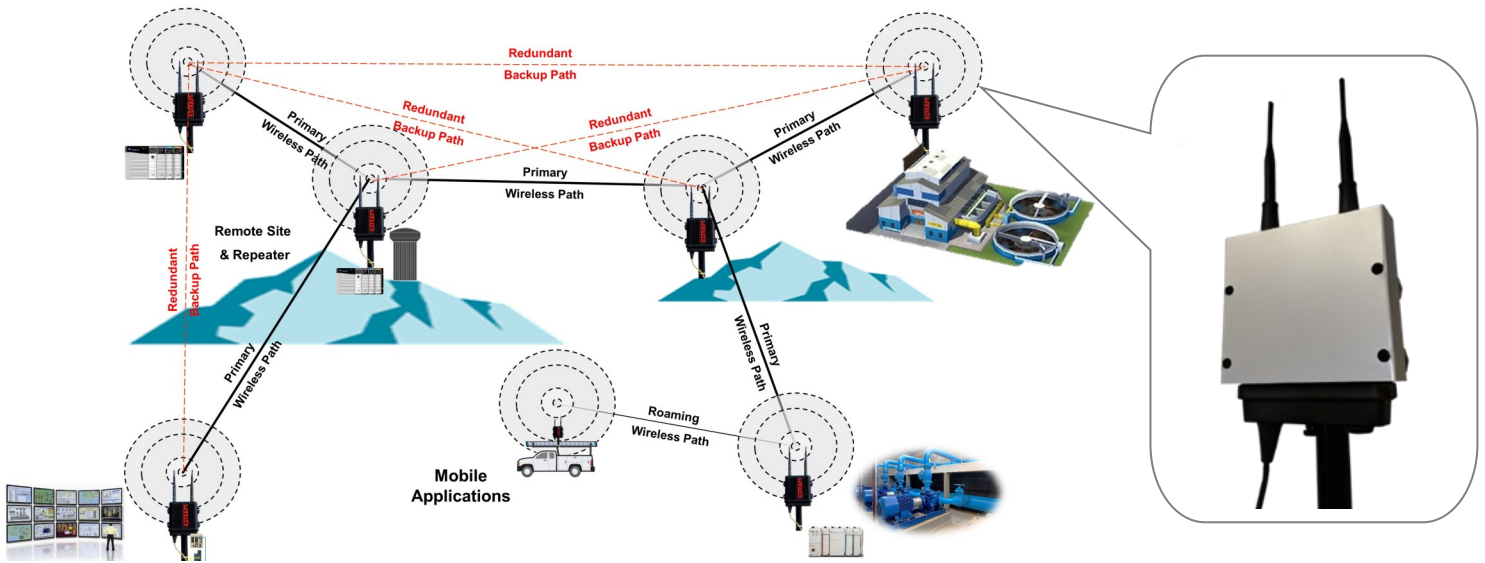


Agriculture



Infrastructure

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ESTeem Horizon Series Specifications

Transmitter/Receiver	Horizon 900	Horizon 2.4	Horizon 4.9	Horizon 5.8
Frequency of Operation (Software Selectable)	902-928 MHz (4 Channels)	2.4 GHz (11-channels)	4.9 GHz (2-channels)	5.8 GHz (17-channels)
RF Data Rate	1 to 72.2 Mbps	1 to 150 Mbps	6 to 72.2 Mbps	6 to 300 Mbps
Max Tx Output Power (Software Selectable)	1 Watt (30dBm)	1 Watt (30dBm)	1 Watt (30dBm)	250 mW (24dBm)
Channel Bandwidth	5, 10 or 20 MHz	5, 10, 20 or 40 MHz	20 MHz	5, 10, 20 or 40 MHz
Tx Output Impedance	50 ohms			
Rx Sensitivity	-93 to -64 dBm	-97 to -65 dBm	-94 to -65 dBm	-93 to -73 dBm
FCC Type Acceptance	ENPHZN216AD	ENPHZN216AN	ENPHZN216AP	TV7R11E5HND
Industry Canada Type Acceptance	2163A-216AD	2163A-216AN	Not Approved	Not Approved
LED Indicators	Power (On/Off) - Status (On/Off) - Transmitter (On/Off) - Receiver (On/Off)			
Power Requirements				
Receive	600 ma @ 12 VDC			
Transmit	1.25 A @ 12 VDC			
PoE Power Supply	(IEEE 802.3at, 30 watts) (opt)			
External Power Input	10 to 16 VDC @ 1.5 A			
Input/Output Connectors				
Ethernet Port 1 (10/100/1000)	RJ-45 Female			
Ethernet Port 2 (10/100/1000)	RJ-45 Female			
802.11 Compatibility	n/a	802.11n/g/b	n/a	802.11n/a
RS-232C Data Port (2,400 to 115.2 K baud)	RJ-45 Female			
RS-232C Programming Port (115,200,N,8,1)	RJ-45 Female			
Antenna Input/Outputs	TNC Reverse Female		TNC Female	TNC Reverse Female
External DC Input Power	Mini-Combicon, 3-pin Female			
Case				
Temperature Range	-30° to +60° C			
Humidity	95% Non-condensing			
Dimensions	1.9 in. H x 6.7 in. W x 6.2 in. L			
Weight	1.25 lbs.			
Product Warranty	1 Year			
Other				
Outdoor Pole Mt. Kit	AA195PM (NEMA4 Rating When Used)			
GPS Location	Optional (Factory Installed)			
PoE Power Supply	AA175.2 (opt)			
Security	WPA2, WPA, AES-128/256, TKIP, WEP-64/128 MAC ID filter			