

Horizon Series

Advanced Wireless Solutions



Core Values & Key Features

FREQUENCY FLEXIBILITY

Offered in 900MHz, 2.4GHz, 4.9GHz, and 5.8GHz to support your application strategies.



- Horizon 900MHz – 72 Mbps
- Horizon 2.4GHz – 300 Mbps w/ Wi-Fi Support
- Horizon 4.9GHz – 72 Mbps
- Horizon 5.8GHz – 300 Mbps w/ Wi-Fi Support

ADVANCED SECURITY

Enhanced network security featuring AES 256 encryption, stringent access controls, and advanced network segmentation capabilities.



- AES-128/256 Encryption, WPA2 PSK/Enterprise
- Stringent Network Access Controls
- Managed Wi-Fi User Interface

LONG RANGE VARIED SETUPS

Experience high-speed connectivity at maximum range, exceptional indoor coverage, and extensive outdoor reach. Designed for future readiness.



- Maximum Coverage at Full Speed
- Versatile Mounting: Cabinet, DIN, or Direct Pole
- 9 User Selectable Modes of Operation
 - ❖ Fixed Location & Mobile/Client

MESH NETWORK RELIABILITY

Ensures continuous uptime and data integrity with self-healing, redundant MESH technology, delivering real-time data access.



- Dynamic, Self-Healing MESH Networking
- Prioritized Communication Routes
- Auto MESH setup with “Rapid Ready Link”

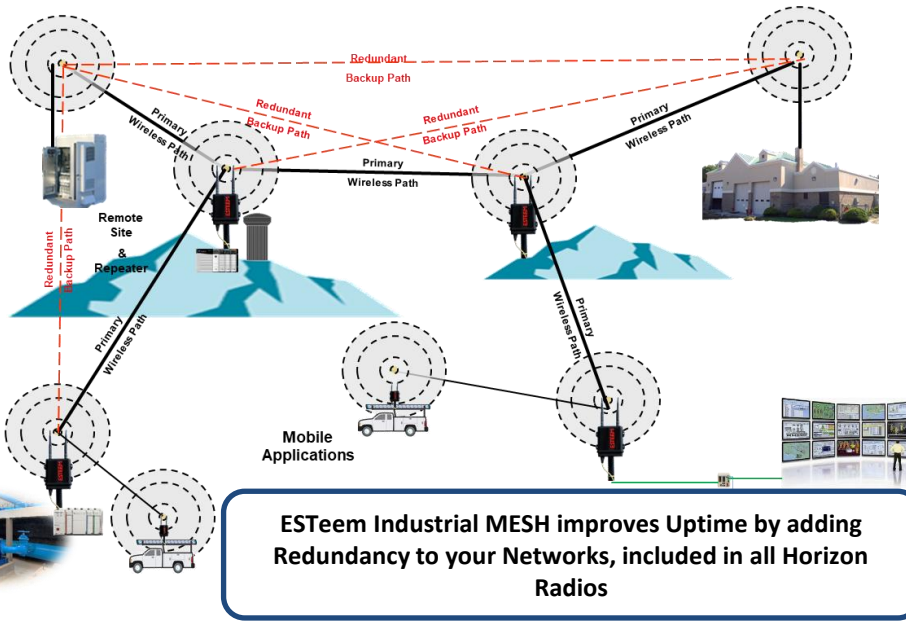
NETWORK VISIBILITY LONGEVITY

Proactive real-time monitoring via SNMP or ModbusTCP enhances wireless network efficiency and security.



- Scalable, Adaptable Network Solutions
- Real-time Network Health Monitoring
- Forward/Backward Generational Compatibility





ESTeem Industrial MESH improves Uptime by adding Redundancy to your Networks, included in all Horizon Radios



Enclosure Installation – DIN Mount Option



Direct NEMA 4 Installation - Pole Mount Option

Horizon Series Specifications

	Horizon 900	Horizon 2.4-MIMO	Horizon 4.9	Horizon 5.8 (w/MIMO)
-Transmitter/Receiver-				
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 - 72.2 Mbps	1 - 300 Mbps	6 - 72.2 Mbps	6 - 300 Mbps
Max TX Output Power (Software Selectable)	1W (30dBm)	500mW (27dBm)	1W (30dBm)	250mW (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	50 ohms	50 ohms	50 ohms
RX Sensitivity	-93 dBm	-93 dBm	-94 dBm	-93 dBm
FCC Type Acceptance	ENPHZN216AD	TV7R11E2HPND	ENPHZN216AP	TV7R11E5HND
Industry Canada Type Acceptance	2163A-216AD	7442A-R11E2HPND	Not Approved	Not Approved
LED Indicators	Power, Status, TX, RX (On/Off)	Power, Status, TX, RX (On/Off)	Power, Status, TX, RX (On/Off)	Power, Status, TX, RX (On/Off)
-Power Requirements-				
Receive	600mA @ 12V DC	600mA @ 12V DC	600mA @ 12V DC	600mA @ 12V DC
Transmit	1.25A @ 12V DC	1.25A @ 12V DC	1.25A @ 12V DC	1.25A @ 12V DC
PoE Power Supply	30W PoE+ (IEEE 802.3at)	30W PoE+ (IEEE 802.3at)	30W PoE+ (IEEE 802.3at)	30W PoE+ (IEEE 802.3at)
Auxiliary Power Input	10 - 16V DC @ 1.5A	10 - 16V DC @ 1.5A	10 - 16V DC @ 1.5A	10 - 16V DC @ 1.5A
-Input/Output Connectors-				
Ethernet Port 1 & 2 (10/100/1000)	RJ-45 Female	RJ-45 Female	RJ-45 Female	RJ-45 Female
802.11 Compatibility	None	802.11n/g/b	None	802.11n/a
RS-232C Data Port (2400 to 115200 baud)	RJ-45 Female	RJ-45 Female	RJ-45 Female	RJ-45 Female
RS-232C Programming Port (115200,8,N,1)	RJ-45 Female	RJ-45 Female	RJ-45 Female	RJ-45 Female
Antenna Input/Output	TNC-F/RP	TNC-F/RP	TNC-F	TNC-F/RP
External DC Input Power	Mini-Combicon, 3-Pin Female	Mini-Combicon, 3-Pin Female	Mini-Combicon, 3-Pin Female	Mini-Combicon, 3-Pin Female
-Case-				
Temperature Range	-30° to +60° C	-30° to +60° C	-30° to +60° C	-30° to +60° C
Humidity	95% Non-Condensing	95% Non-Condensing	95% Non-Condensing	95% Non-Condensing
Dimensions	1.9"H x 6.7"W x 6.2"L	1.9"H x 6.7"W x 6.2"L	1.9"H x 6.7"W x 6.2"L	1.9"H x 6.7"W x 6.2"L
Weight	1.25 lbs.	1.25 lbs.	1.25 lbs.	1.25 lbs.
Product Warranty	1 Year	1 Year	1 Year	1 Year
-Other-				
Outdoor Pole Mount Kit	AA195PM (NEMA4 Rated)	AA195PM (NEMA4 Rated)	AA195PM (NEMA4 Rated)	AA195PM (NEMA4 Rated)
GPS Location	Optional Add-On (Factory Installed)	Optional Add-On (Factory Installed)	Optional Add-On (Factory Installed)	Optional Add-On (Factory Installed)
Wi-Fi Access	Optional Add-On (Factory Installed)	Native	Not Available	Native
PoE Power Supply	AA175.5 (Optional)	AA175.5 (Optional)	AA175.5 (Optional)	AA175.5 (Optional)
Security	WEP-64/128, TKIP, WPA, WPA2, AES-128/256	WEP-64/128, TKIP, WPA, WPA2, AES-128/256	WEP-64/128, TKIP, WPA, WPA2, AES-128/256	WEP-64/128, TKIP, WPA, WPA2, AES-128/256
Add-On Features	GPS, Encompass	GPS	GPS	GPS