

Non-line-of-sight :: 5.8 GHz

The AW-D2-5800 replaces costly cables and trenching with a non-line-of-sight, wireless network camera housing that enables remote network cameras. AvaLAN's products offer the ideal combination of price, penetrating range, data rate, security, interference avoidance, Quality of Service, and ease-of-use.



AW-D2-5800 Kit

Integrated 5.8 GHz wireless dome housing for PTZ network cameras. Kit includes:

- (1) Dotworkz D2 outdoor dome housing with heater/blower
- (1) AW5800x outdoor radio
- (2) 120 VAC to 24 VAC/40 Va transformers
- (2) AW5 - 5 dBi omni-directional antennae
- (1) 120 VAC to 12 VDC power adapter
- (1) Power over Ethernet injector

Features

- High RF output power and exceptional receive sensitivity provide ultra-long-range wireless IP digital video delivery up to 30 miles
- Does not interfere with Wi-Fi networks
- 128 bit encrypted with dynamic private keys
- Highest Quality of Service (QoS) available – synchronous point-to-point protocol enables IP video applications that require low data latency and jitter
- Simple plug and play – pre-configured as matched pairs with no user programming required
- 58 non-overlapping channels with frequency agility to avoid interference
- Operates in the 5.725-5.850 GHz band and does not require a license to operate or install in the USA or Canada



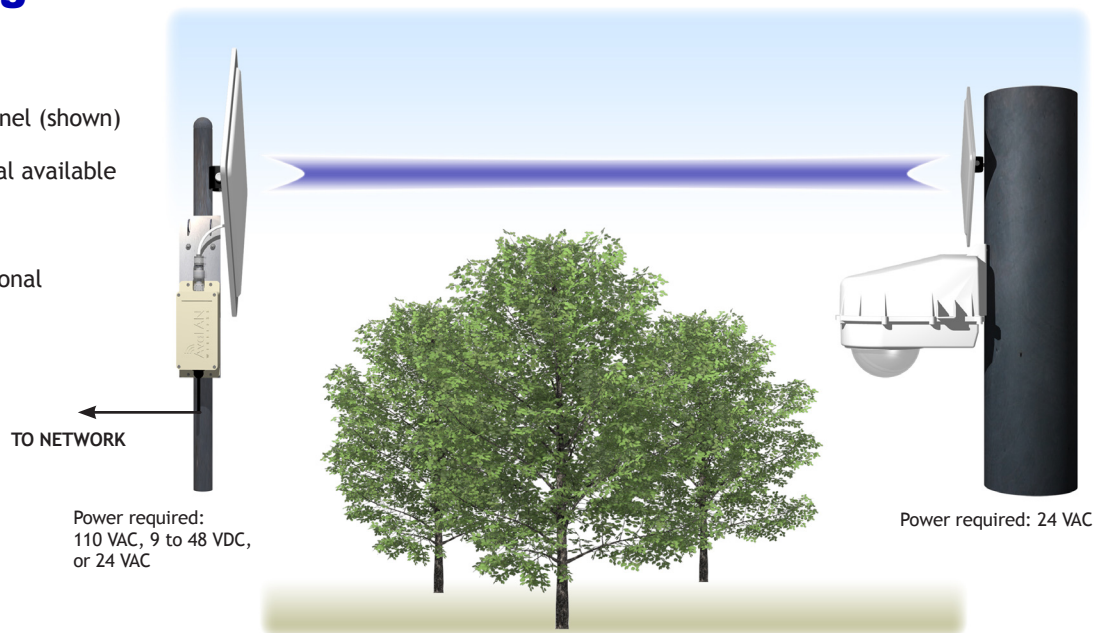
System diagram

Antennas

- AW23-5800:
 - 23 dBi directional panel (shown)
- AW5-5800:
 - 5 dBi omni-directional available

Line-of-sight range

- More than 30 miles (with 23 dBi directional antennae)



Technical specifications

| CHARACTERISTIC | SPECIFICATION / DESCRIPTION |
|----------------------------|--|
| RF transmission rate | 1.563 Mb/s |
| Ethernet throughput | 935 Mb/s |
| Output power | +21 dBm (20 Watts EIRP used with 23 dBi antennae AW23-5800) |
| Receive sensitivity | -98 dBm at 10e-4 BER (-121 dBm with 23 dBi antennae AW23-5800) |
| Radio link budget | 128 dB with 5 dBi antenna AW5-5800 164 dB with 23 dBi antennae AW23-5800 |
| Line-of-sight range | 1 mile LOS with 5 dBi antenna AW5-5800 40 miles LOS with 23 dBi antennae AW23-5800 |
| Radio channels/bandwidth | 58 non-overlapping with 2.0833 MHz spacing and 1.75 MHz occupied bandwidth |
| Voltage range | AW-5800x receiver: 9-48 VDC (120 VAC to 12 VDC adapter included) / 24 VAC optional – AW-24V AW-D2-5800: 24 VAC |
| Power consumption | AW-5800x: TX 1.8 W and RX 1 W over 9-48 VDC input voltage AW-D2-5800: 55 W (including 20 W heater) maximum |
| Radio channels | 58 non-overlapping |
| Automatic frequency select | Yes – radio channel automatically selected and adaptively optimized |
| Manual frequency mode | Yes |
| Status LEDs | Power, Ethernet Link, RF RX, RF TX, 6/Channel, and 6/Link Quality |
| Error correction technique | Sub-block error detection and retransmission |
| Temperature range | AW-5800x: -40° C to 70° C (depends on temperature range of camera) AW-D2-5800: -30° C to 50° C (depends on temperature range of camera) Heater turns on at 10° C and off at 27° C Blower turns on at 45° C and off at 27° C |
| Voltage range | Use with 9 VDC to 48 VDC POE systems with lines 4/5 positive, 7/8 ground |

Ordering information

| PART NUMBER | DESCRIPTION |
|-------------|---|
| AW-D2-5800 | Integrated 5.8 GHz wireless dome housing kit for PTZ IP cameras |

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