

ANALOG VIDEO

Falcon PLUS™ 5.8 GHz

FM All-Weather Wireless Video/Audio System

WIRELESS ANALOG VIDEO TRANSMISSION



1, 4, and 7 mile options

Falcon PLUS™ shown with 15 dBi patch antenna

The Falcon PLUS™ integrates the latest technology along with user-friendly options to offer a wireless solution that was designed with the system integrator in mind. Capable of line-of-sight ranges up to seven miles (using our 30dB dish antenna), the Falcon PLUS™ offers features that make it much more than a wireless video system. The system will transmit either stereo audio or mono audio with two Virtual Wire contact closures. The Falcon PLUS™ also has a data pass-through mode that transmits RS232 data at rates between 1200 and 9600 baud; with the optional LC-485/422 daughtercard it has similar provisions for transmitting RS422 and RS485 data.

Rugged Outdoor Durability

With a rugged powder-coated aluminum all-weather enclosure and all necessary mounting hardware, the Falcon PLUS™ comes ready right out of the box for the most demanding outdoor conditions. Two flanges and an SMA-type connector provide a watertight and weatherproof seal for all power and antenna connections.

Highlights

- ▶ Clear line-of-sight ranges up to 7 miles
- ▶ NTSC/PAL with 460 lines of horizontal resolution
- ▶ Stereo audio transmission
- ▶ Dual Virtual Wire™ contact closures with discrete outputs
- ▶ Data pass-through mode
- ▶ Dual standby mode (secure/energy saving)
- ▶ Operates on 6 to 12 volts DC
- ▶ NEMA 4X outdoor rated, rugged built for operation extreme weather conditions
- ▶ FCC Part 15 and DOC (Canada) approved

3 Ranges Available


RANGE	RECEIVER ANTENNA	GAIN
1 mile	AD5900-15 (R / L) patch	15 dBi
4 miles	AD5900-27 (R / L) 2-ft. dish	27 dBi
7 miles	AD5900-30 (R / L) 3-ft. dish	30 dBi
Transmitter antenna for all systems is AD5900-15 (RP / LP) patch		




Falcon PLUS™ Specifications

5.8 GHz Analog Video/Audio Transmitter/Receiver

VTX5900 Transmitter

Frequency range	5740–5860 MHz	
RF Connector	TX: Reverse-polarity SMA (male) Note the center pin	
RF Output Power	per FCC Part 15.249	
Frequency Stability	0.0025% PLL-stabilized	
Current Draw	220mA max., 30mA in standby	
Bandwidth	Video 5.8 MHz Audio 50 Hz to 15 kHz ±3 dB	
Alarms	2 Virtual Wire™, contact closure (configurable with TrangoLink software)	
Input Impedance	Video 75 Ohms Audio 600 Ohms	
Audio Input	1 Vpp line level, RCA connectors	
Video Input	BNC connector	

VRX5950 Receiver

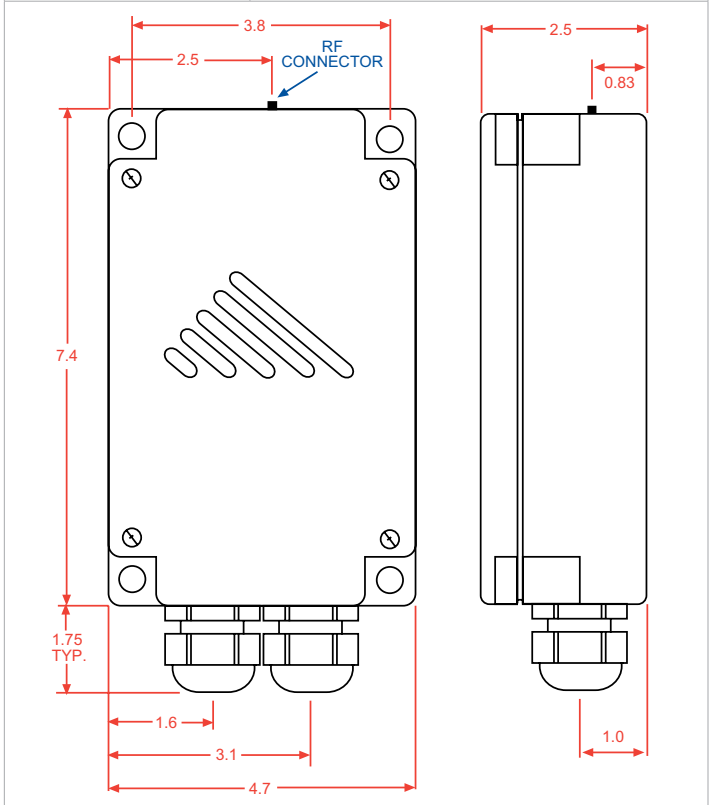
Receiver Sensitivity	-90 dBm	
RF Connector	RX: Standard SMA (female) Note the center hole	
Channel Rejection	>20 dB between even channels, 20 dB between odd channels >90 dB with 4 channel spacing (i.e. Channel 1 to Channel 5)	
Image Rejection	> 60 dB	
Current Draw	520mA nominal	
Signal-to-Noise	Video > 45 dB with -75 dBm RF input > 40 dB with -80 dBm RF input Audio >12 dB SINAD with -85dBm RF input	
Audio Output	1.5 Vpp line level typical @ 600 Ohms, RCA connectors	
Video Output	BNC connector	

System Specifications

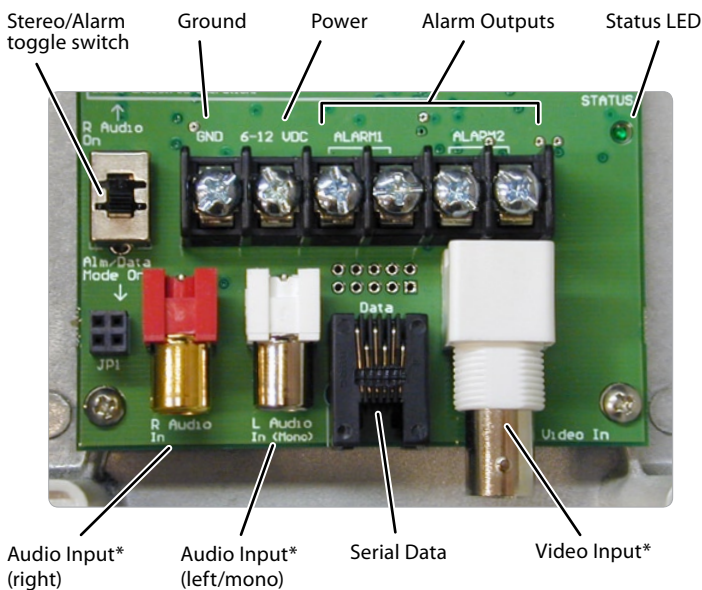
Serial Interface (Data Connection)	RJ11 jack connecting to PC running TrangoLink™ software
Power Connectors	Two-position terminal block
Power Input	6-12 VDC
Humidity	100% (enclosure)
Operating Temperature	-22° to +158° F (-30° to +70° C)
Storage Temperature	-40° to +185° F (-40° to +85° C)

Rugged All-Weather Enclosure

Dimensions (W × H × D)	4.7 × 8.8 × 2.5 inches (12 × 22.4 × 6.4 cm)
Weight	2.65 pounds or 1.2 kg
Mounting Hardware	Brackets (2), bolts (4) for 2" pipe (max. dia.)



VTX5900 Connections



* Inputs on VTX5900, Outputs on VRX5950

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