

FalconPLUS™ DATASHEET

5.8 GHz FM All-Weather Wireless Video System

- Clear line-of-sight ranges up to seven miles.
- NTSC/PAL with 460 lines of horizontal resolution.
- Stereo audio transmission.
- Dual Virtual Wire™ contact closures with discrete outputs.
- Data pass-through mode.
- Operates on 6 to 12 volts DC.
- Rugged, all-weather construction, NEMA4× rated.
- Approved by FCC and DOC.



The FalconPLUS 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 31dB DSS dish antenna), the FalconPLUS 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 FalconPLUS 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.

The FalconPLUS's rugged, powder-coated, all-weather aluminum enclosure comes with all necessary mounting hardware, ready right out of the box for the most demanding outdoor environments. Two flanges and an SMA-type connector provide a watertight and weatherproof seal for all power and antenna connections.

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VTX5900 Transmitter

FREQUENCY RANGE

5740–5860 MHz

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 Ghz

Audio 50 Hz to 15 kHz ± 3 dB

INPUT IMPEDANCE

Video 75 Ohms

Audio 600 Ohms

AUDIO INPUT

1 V_{pp} line level

VRX5900 Receiver

RECEIVER SENSITIVITY

–90 dBm

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 V_{pp} line level typical at 600 Ohms

System Specifications

SERIAL INTERFACE

RJ11 jack connecting to PC running TrangoLink™

RF CONNECTOR

Tx: reverse-polarity SMA, per FCC 15.203

Rx: standard SMA

POWER CONNECTORS

Two-position terminal block

RADIO DIMENSIONS

4.7"×8.8"×2.5" or 12×22.4×6.4cm

WEIGHT

2.65 pounds or 1.2 kg

HUMIDITY

100% (enclosure)

OPERATING TEMPERATURE

–22°F to +158° or –30°C to +70°C

STORAGE TEMPERATURE

–22°F to +185° or –30°C to +85°C

