

# SOLO4 – Robust Transmitter

COFDM – Video, Audio Telemetry and IP Products

**COBHAM**

September 2011 Data Sheet

The most important thing we build is trust



SOLO4 Robust Transmitter

The Robust SOLO4 Transmitter unit from Cobham Tactical Communications and Surveillance is a feature-rich COFDM digital video transmitter, which can operate in a variety of transmission bandwidths allowing the user to trade off image quality against range, to suit all types of missions. Excellent range, performance and spectral efficiency are offered when operating in the unique 2.5MHz and 1.25MHz narrow bandwidth modes.

The Robust SOLO4 Transmitter has Cobham technology at its core and is ideal for establishing prolonged rugged wireless video links, in harsh external environments. Security is ensured with our built-in 32 bit ABS encryption or, for greater security, AES128/256 bit encryption is also available, subject to export controls. The Robust SOLO4 Transmitter is available in a variety of frequency bands from 340MHz to 3.4GHz.

Able to transmit images in a Non-Line of Sight (NLOS) environment up to 500m depending on mode and frequency, the Robust SOLO4 Transmitter can achieve even further range with the bolt-on booster PA. Supplied in a sealed IP 67 rated aluminium enclosure, the Robust SOLO4 Transmitter can be used in a variety of applications and is available in microwave and UHF frequencies.

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## Specification:

### Input

Composite Video	4 pin amphenol
Audio	3 pin amphenol
RS-232 Control and Data	7 pin amphenol
12V DC In	3 pin amphenol

### Output

RF Out	TNC
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### RF

Frequency Bands	340 to 470 MHz 470 to 520 MHz 570 to 670 MHz 1.15 to 1.40 GHz 2.28 to 2.55 GHz 2.70 to 2.90 GHz 3.10 to 3.40 GHz
Power	100mW
Power Control	20dB in 1dB steps
Tuning Steps	250 KHz

### Modulation

Bandwidths (DVB-T or SOLO)	8/7/6/2.5MHz (1.25MHz optional)
Default Modes:	
Mode 1 - Short Range	2.5MHz, 16QAM, FEC2/3, 4.8Mb/s
Mode 2 - Normal Range	2.5MHz, QPSK, FEC2/3, 2.4Mb/s
Mode 3 - Long Range	2.5MHz, QPSK, FEC1/3, 1.2Mb/s
Mode 4 - Ultra Long Range	(1.25MHz, QPSK, FEC1/3, 600kb/s optional)

### Video

Line Standard	PAL/NTSC
Resolution	704, 528, 480, 352
Coding Mode	MPEG2 (MPEG4 optional)
Delay	43ms to 120ms depending on mode
Frame Rate	Full/Half/Quarter/Eighth (selectable)

### Audio

Input	Line Level or Microphone
Sample Rate	32KHz, 16KHz, 8KHz switchable
Bits per Sample	12 or 8 bit switchable

### Data Interface

RS232 Data Input	1K2 to 115K2 baud switchable
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### Encryption

Format	ABS 32 bit as standard AES128/256 (optional)
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### Control

Remote Control	RS232 Control from PC GUI Application
Local Control	Front Panel 8 channel select, RF on/off, Range mode, Lock, Alarm

### Physical

Dimension	L 150mm, W 120mm, H 35mm
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### Power

DC Input	10 to 16V
Power Consumption	4.8 to 6W depending on mode

### Environment

Temperature Range	-20 to +50 deg C
Sealing	IP67

### Product Codes:

SOL4TXR-034047	Solo4 TX Robust 340-470MHz
SOL4TXR-047052	Solo4 TX Robust 470-520MHz
SOL4TXR-057067	Solo4 TX Robust 570-670MHz
SOL4TXR-115140	Solo4 TX Robust 1.15-1.40GHz
SOL4TXR-228255	Solo4 TX Robust 2.28-2.55GHz
SOL4TXR-270290	Solo4 TX Robust 2.70-2.90GHz
SOL4TXR-310340	Solo4 TX Robust 3.10-3.40GHz

### Product Code Includes

1 x CA0219	Power cable-2m for Robust TX/RX
1 x CA0222	CTRL cable-2m for Robust RX/TX
1 x CA0224	Audio cable -1m for Robust TX
1 x CA0225	Video In Cable -1m for Robust TX

### Accessory Options

SOLAMPR1W	Robust Clip-on 1W amplifier
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### Licensing Options

TX-UP	Upgrade from 2.5MHz to 1.25MHz
TX-UPX	Upgrade from 1.25MHz to 625kHz
AES128TX	AES Transmitter 128 Bit encryption
AES256TX	AES Transmitter 256 Bit encryption

For further information please contact:

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