

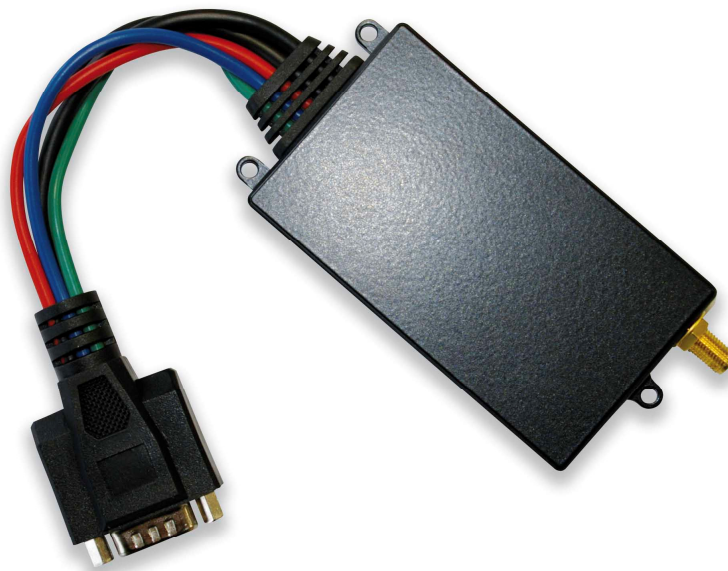
# SOLO4 - Bodywire Transmitter

COFDM – Video, Audio Telemetry and IP Products

**COBHAM**

April 2009 Data Sheet

The most important thing we build is trust



The SOLO4 Bodywire Transmitter is a COFDM digital video transmitter from Cobham Surveillance, designed specifically for covert video installations and body-worn applications.

With domo technology at its core, the small size and low power consumption (typically 4W or less) of the SOLO4 Bodywire make it the product of choice for covert video hides, or applications requiring long term battery power deployments, small unmanned aerial vehicles, and body-worn or bodywire use.

The SOLO4 Bodywire transmitter employs MPEG2 encoding (MPEG4 is also available) for excellent image quality retention. Equipped with integral COFDM modulation, the SOLO4 transmitter is ideal for establishing rugged wireless video links in all environments, including mobile and urban environments. Offering several user-selectable modes that trade off image quality against range, the SOLO4 transmitter is ideal for all mission types. The SOLO4 Bodywire includes RF up-conversion and PA circuitry to make a complete single board transmitter. SOLO4 Bodywire is supplied in a simple lightweight case with attached Lemo cable connectors.

Security is ensured with optional AES128/256 Encryption.

The SOLO4 Bodywire transmitter will transmit images in a non-line of sight environment up to 750m, depending on mode and frequency; further range can be achieved with the booster PA.

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## Specification:

### Inputs

Composite Video	BNC (break out cable)
SDI (optional)	BNC (break out cable)
Audio 1	Phono (break out cable)
Audio 2	Phono (break out cable)
RS232 Control	Dtype (break out cable)
RS232 Data	Dtype (break out cable)
Power	Lemo 4 pin (break out cable)

### Output

RF Out	SMA
RF Power	100mW (14dBm low power mode)
Tuning Range	5.5 to 6GHz 4.5 to 5GHz 2.0 to 2.5GHz 1.0 to 1.5GHz (model dependant) 300 – 450MHz
Tuning Steps	250KHz

### Modulation

Transmit Modes Narrowband:	
Bandwidth	2.5MHz
FEC	2/3, 1/3
Modulation	QPSK or 16QAM
Upgradable to	1.25MHz narrow bandwidth
Transmit Modes Wideband:	
DVB-T Bandwidth	8/7/6MHz
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Modulation	QPSK, 16QAM and 64QAM

### Video

Input Format	PAL, NTSC (with or without pedestal) RS170 and SDI (optional)
Encoding Narrowband	MPEG2 (or MPEG4 option)
Encoding Wideband	MPEG2 Only
MPEG2 Frame Rate	Full Frame Rate
MPEG4 Frame Rate	Full or 1/2, 1/4, 1/8, 1/24
Delay	500ms to 43ms (mode dependant)

### Audio

Input	Line Level or Microphone switchable -2dBu Max input level
Audio Encoding MPEG Layer 1: Sample Rate	32KHz 384Kb/s to 64kb/s
Audio Encoding NICAM Style: Sample Rate	32KHz, 16KHz, 8KHz switchable
Bits per sample	12 or 8 bit switchable

### Data Interface

RS232 Data Input 1k2 to 115K2 baud switchable

Encryption Format ABS Encryption 32 bit  
AES128/256 (optional)

### Control

Control Interface RS232 Control from PC GUI Application  
Front Panel None supplied, future external plug in  
RS232 controller (field gun)

### Physical

Dimension (chassis) L 86mm, W 49mm, H 11mm (main)  
Weight 70g

### Power

DC Input 5.9V to 16V Reverse Polarity Protected  
Power Consumption Normal consumption 4.1W  
for 100mW out  
Low power mode 3.7W for 25mW out

### Environment

Temperature Range -15 to +60 °C  
Vibration Tested with 15g shock and Random with  
sine vibration 3g  
Results will depend on chassis installation

### Product Code:

SOL4MTX-550600  
SOL4MTX-450500  
SOL4MTX-200250  
SOL4MTX-165250  
SOL4MTX-100150  
SOL4MTX-030045

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For further information please contact:

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