

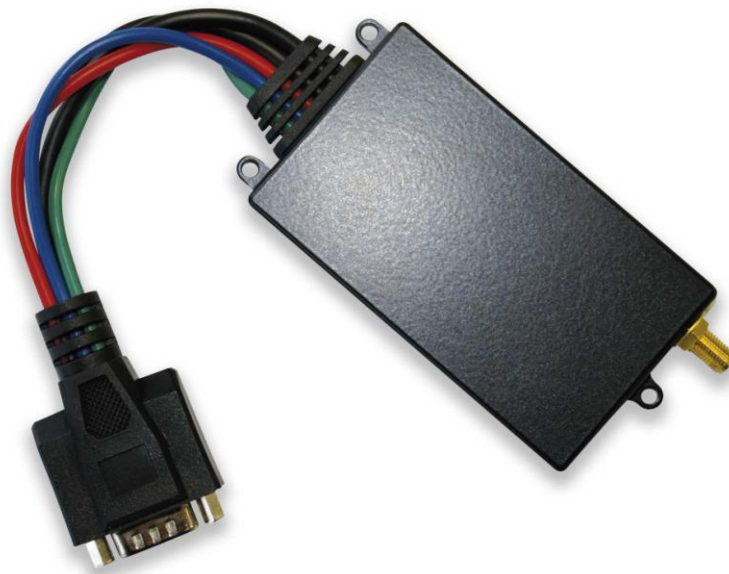
SOLO4 - Bodywire Transmitter

COFDM – Video, Audio Telemetry and IP Products

COBHAM

September 2011 Data Sheet

The most important thing we build is trust



The SOLO4 Bodywire Transmitter is a COFDM digital video transmitter from Cobham Tactical Communications and 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.

SOLO4 – Bodywire Transmitter

COFDM – Video, Audio Telemetry and IP Products
September 2011 Data Sheet

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 4.4 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 and 625kHz 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 and AES256 (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 Codes:

SOL4MTX-550600	Solo4 Micro TX 5.50-6.00GHz
SOL4MTX-440500	Solo4 Micro TX 4.40-5.00GHz
SOL4MTX-200250	Solo4 Micro TX 2.00-2.50GHz
SOL4MTX-165250	Solo4 Micro TX 1.65-2.50GHz
SOL4MTX-100150	Solo4 Micro TX 1.00-1.50GHz
SOL4MTX-030045	Solo4 Micro TX 300-450MHz

Product Code Includes

1 x CA0002	SOLO 12V DC Power Lead Lemo-wire 3m
1 x CA0317	Bodywire External Basic Breakout Cable

Accessory Options

SOL4MTXH-UP	Upgrade for SOLMTX unit to add Hirose functionality.
-------------	---

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:

Cobham Tactical Communications and Surveillance

The Cobham Centre – Solent, Fusion 2
1100 Parkway
Solent Business Park
Whiteley
Hampshire, PO15 7AB
England

T: +44 (0)1489 566 750
F: +44 (0)1489 880 538
css.sales@cobham.com

Products are available to security users only, in licensed frequency bands. These products are not approved for use by unlicensed users.

Commercial products are available to unlicensed users - contact Cobham Tactical Communications and Surveillance direct for details.

All product specifications are subject to change without notice. Cobham Tactical Communications and Surveillance will not be liable for technical or editorial errors or omissions.

