

# SOLO4 – Audio and Telemetry Transmitter

COFDM – Video, Audio Telemetry and IP Products

**COBHAM**

November 2011 Data Sheet

The most important thing we build is trust

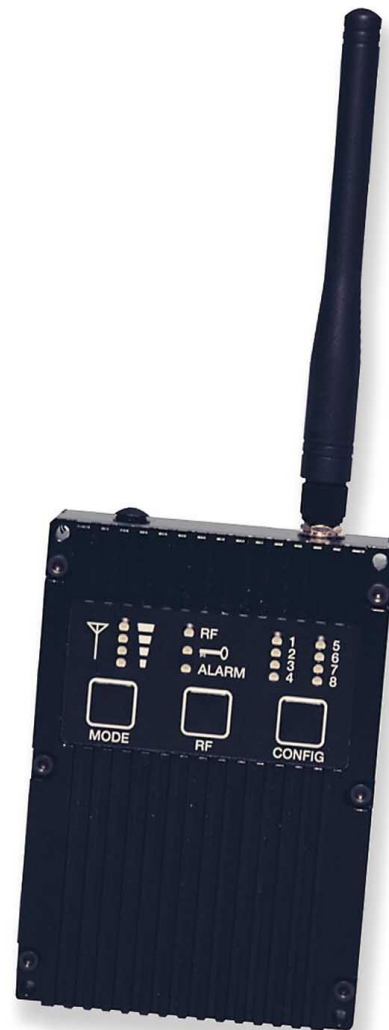
The SOLO4 Audio and Telemetry Transmitter from Cobham Tactical Communications and Surveillance is a COFDM transmitter, designed specifically for the transmission of audio and telemetry data. The SOLO4 Audio and Telemetry Transmitter has Cobham technology at its core and can be configured into different user selectable bandwidths, to satisfy a variety of requirements. Bandwidths from 25 kHz to 125 kHz are available offering user capacity from 14 to 146kb/s. This capacity can be shared between audio and user RS232 telemetry data, in any combination. Wider bandwidths are available on request.

The SOLO4 Audio and Telemetry Transmitter employs a unique narrow band COFDM modulation and will transmit telemetry data and audio in a non-line of sight environment up to 5km, depending on mode and frequency. The SOLO4 Audio and Telemetry Transmitter is typically employed to provide talk back and also telemetry data for PTZ control in Cobham wireless video systems, especially mobile systems.

Security is ensured with AES128/256 bit encryption subject to export controls.

The SOLO4 Audio and Telemetry Transmitter can also be connected to Cobham IP solutions to create rugged wireless IP Bridge applications.

Supplied in a rugged, lightweight weather proof aluminium chassis, the SOLO4 Audio and Telemetry Transmitter can be used in body-worn applications, or prolonged outdoor deployments.



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## Specification:

### Input

Audio	5 pin OB Lemo
GPIO	16 pin Hirose
RS232 Data	16 pin Hirose
RS232 Control	16 pin Hirose
Power	4 pin OB Lemo

### Output

RF Out	SMA
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### RF

Frequency Bands	902.1 to 903.6MHz 920 to 928MHz 868 to 870MHz 458.5 to 459.5MHz (others available)
Power	100mW
Power Control	30dB in 1dB steps
Tuning Steps	12.5kHz

### Modulation

Bandwidth	75 to 125kHz (A model only) 25 to 125kHz
Carriers	99
Modulation	QPSK or 16QAM
FEC	1/2

### Settings

Channel Spacing	25kHz	50kHz	75kHz
	100kHz	125kHz	
Bandwidth	20kHz	40kHz	60kHz
	80kHz	100kHz	
Bitrate QPSK	14kb/s	29kb/s	44kb/s
	58kb/s	73kb/s	
16QAM	28kb/s	58kb/s	88kb/s
	116kb/s	146kb/s	

### Audio (A model only) Phono

Input	Line Level or Microphone
Sample Rate	8kHz
Bits per Sample	24kbit (Toll) or 32kbit (Phone) Quality
Algorithm	G726

### Encryption

Format	AES128/256 (optional)
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### Data Interface

Format	RS232
Baud Rate	1200, 2400, 4800, 9600, 19200, 38400, 57600 or 115200 baud
Parity	None, Even, Odd switchable
Flow Control	XON/XOFF (optional)
IP Interface	RS232 style interface for IP Card

### 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 Base Unit	L 102mm, W 71mm, H 22mm
Weight Base Unit	350g

### Power

DC Input	5.9 to 16V Reverse Polarity Protected
Power Consumption	2.4 to 3W depending on mode

### Environment

Temperature Range	-20 to +70 deg C
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### Product Code:

TELTX-092093	920 to 928MHz
TELTXA-092093	920 to 928MHz
TELTX-090090	902.1 to 903.6MHz
TELTXA-090090	902.1 to 903.6MHz
TELTX-086087	868 to 870MHz
TELTXA-086087	868 to 870MHz
TELTX-045045	458.5 to 459.5MHz
TELTXA-045045	458.5 to 459.5MHz

### Product Code Includes

- 1 x LPRS Antenna
- 1 x SOLO 12V DC Power Lead Lemo-wire 2m
- 1 x 3rd Generation Man-worn Control Cable
- 1 x Data Cable

### Accessory Options

None

### Licensing Options

None

Note: The transmitter can be tuned over wider bands than listed above but the receiver will only tune over the frequency range listed.

For further information please contact:

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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.

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