

High Definition COFDM Transmitter

COFDM – Video, Audio Telemetry and IP Products

COBHAM

March 2010 Data Sheet

The most important thing we build is trust



The domo SOLO HD Transmitter is a rugged digital video transmitter, ideal for law enforcement surveillance or sports and news links applications. This fully featured transmitter operates an ultra efficient H.264 / MPEG4 HD encoder together with a COFDM Modulator. The subsequent bit-rate savings translate directly to additional range on the microwave link.

The optimised low delay encoder make the unit ideal for use in live sports and news events.

A range of camera brackets is available to facilitate easy mounting of the SOLO HD transmitter to different camera styles.

The COFDM modulator built into the unit can support both compliant DVB-T modulation and proprietary Narrow-band modes ensuring excellent link performance even in non line of sight or mobile scenarios, the microwave interface has a 100mW or 500mW output power option for additional range. Equipped with HD-SDI, HDMI and composite video interface and audio de-embedding the SOLO HD transmitter can be easily connected to any camera type.

Additional ASI input and output interfaces enable the SOLO HD transmitter to be easily interfaced to other systems, such as the domo satellite modulator range.

The SOLO HD transmitter is compact and low powered enough to facilitate easy connection in any application Security of the transmission can be ensured using the optional embedded AES128/256

For excellent range and coverage, the SOLO HD transmitter can be operated with the domo PRORX receiver with optional HD decoder. The PRORX receiver is available with 2 way, 4 way, 6 way and 8 way diversity.

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Specification:

Input

SD Composite Video	BNC
HD-SDI / SDI	BNC
ASI In	SMB
2 * Stereo Audio (unbalanced)	5 way OB Lemo
RS232 Control	3 way OB Lemo
Power	4 way OB Lemo

Output

RF	SMA
ASI Out	SMB

RF

Frequency Bands	2.0 to 2.5GHz or 3.2 to 3.5GHz Other Frequencies available on request
Tuning Step Size	250kHz
O/P Power	100mW / 500mW model dependant

Modulation

DVB-T Bandwidth	8/7/6MHz
DVB-T Guard	1/32, 1/16, 1/8, 1/4
DVB-T FEC	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T Modulation	QPSK, 16QAM 64QAM (1/2 & 2/3 only)
DVB-T Bit-rates	5Mbps to 27Mbps
Sensitivity	-95dBm best case mode

Domo Narrow-Band	2.5,3 and 3.5MHz modes
Bit-rates	600kbps to 6.7Mbps
Sensitivity	-102dBm best case mode

Video

Video Input	SDI / HD-SDI/HDMI or Composite/Svideo
Compression Type	AVC / H.264 / MPEG-4 Part 10

HD Resolution modes	1080i: 1920*1080 @30 / 29.97 / 25 / 24 / 23.97 (Frames per second) 1080p: 1920*1080 @30 / 29.97 / 25 / 24 / 23.97
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SD Resolution modes	720p: 1280*720 @60/59.94/50 480p: 720*480 @60/59.94 480i: 720*480 @30/29.97 576p: 720*576 @50 576i: 720*576 @25
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Other modes	Horizontal downsampling of 3/4, 2/3, 1/2 Vertical downsampling 1/2 (SIF) Reduced frame rate coding
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Coding Mode	High profile, I/IP 4:2:0
Delay	>100 ms in low delay settings
Encoder Bitrates	0.25 to 30Mb/s

Audio

Audio Input	HD-SDI/ SDI/HDMI 2 stereo digital audio pairs, 1 analogue stereo pair Mic/Aux level
Sample Rate	48 kHz
Format	MPEG Audio Layer 2 or Layer 1 384Kb/s to 64Kb/s mono or stereo,

ASI

Mode	Byte Mode
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Encryption

Type	AES128 / AES256 (optional)
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Control

Remote Control	RS232 Control from PC GUI Application
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Physical

Dimensions	L 130mm, W 80mm, H 30mm
Weight Base Unit	400g

Power

DC Input	6 to 16V Reverse Polarity Protected
Power Consumption	10W for 100mW out, 14W for 500mW, 1080i30 coding.

Environment

Temperature Range	-10 to +50° C
Sealing	Splash Proof

Product Code:

SOLHDTX-200250	H264 / MPEG4 HD Encoder 2 – 2.5GHz 100mW
SOLHDTX-310350	H264 / MPEG4 HD Encoder 3.1 – 3.5GHz 100mW
SOLHDTXA-200250	H264 / MPEG4 HD Encoder 3.1 – 3.5GHz 500mW
SOLHDTXA-310350	H264 / MPEG4 HD Encoder 3.1 – 3.5GHz 500mW

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 Surveillance direct for details.

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

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