



### Description

BWS has built upon the outstanding features of the award-winning Cobham NanoHD TX to create the ultimate PoV/miniature broadcast transmitter.

The SOLO7 Nano HD Transmitter is an ultra-miniature COFDM digital video transmitter, designed specifically for Point-of-View (PoV) and body-worn applications.

With proven Cobham COFDM and H.264 encoder technology at its core, exceptionally small size and ultra-low power consumption (typically 7W), the BWS PoV HD Transmitter enables production teams to offer viewers stunning high definition images from the heart of the action, in situations never previously possible due to equipment size and battery run-time constraints.

The small size and ultra-low power consumption make the BWS NanoPRO TX ideal for UAV 'Octocopter' installations, enabling true long range HD broadcasting from these increasingly popular devices for the first time. Optional lightweight, low power consumption amplifiers are also available for even greater range capability.

The transmitter employs ultra-low latency High Profile H.264 (MPEG-4 AVC) encoding for excellent image quality retention over the wireless link and supports SDI & HD-SDI video input formats up to 1080p50/59.

The BWS NanoPRO Transmitter is supplied in a slim-line, fan-cooled, aluminium lightweight case and features industry standard connectors for RF (SMA), Video (BNC), Power/Data (Hirose), Audio (Hirose) and control (mini USB). An integrated joystick control panel and OLED display are provided for control and monitoring of all parameters.

### Key Features over Standard Unit

- Slimmer profile for PoV applications
- Balanced Mic/Line level analogue audio inputs with P48 mic powering
- Indicators for POWER, VIDEO LOCK and RF ON
- Industry-standard connectors for VIDEO, POWER and AUDIO INPUTS
- Fan cooling for enhanced performance and reliability
- Integrated control panel and status display
- Optional camera mounting bracket converts your BWS NanoPRO into a cameraback TX!

**Specifications**

**Connectors**

RF out (video/audio)	SMA(f)
SDI Video in	BNC(f)
Analogue audio in	6 way Hirose HR10 socket
Power/RS232data in	4 way Hirose HR10 plug
PC control	Mini USB

**RF**

Frequency Bands	230MHz to 8.6GHz (in bands)
Tuning Step Size	250kHz
O/P Power	100mW

**DVB-T Modulation**

DVB-T Bandwidth	8MHz, 7MHz and 6MHz modes
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
DVB-T Bit-rates	3.6Mbps to 32Mbps

**Video**

Video Input	HD-SDI
Input Format	1920x1080p 59.94/50Hz 1920x1080i 59.94/50Hz 1920x1080p 30/29.97/25/24/23.97Hz 1920x1080psf 30/29.97/25/24/23.97Hz 1280x720p 60/59.94/50Hz

Compression Type	AVC/H.264/MPEG-4 Part 10
Coding Mode	High profile level 4.1, I/IP 4:2:0, 4:2:2 Progressive or Interlaced (MBAFF) Horizontal down-sampling of 3/4, 2/3, 1/2

**Audio**

Audio Input	Analogue: Balanced stereo pair +18dBu Max input level (up to 66dB gain), P48 powering SDI Embedded: 2x stereo pairs
Compression Type	MPEG Audio Layer 1 64-448kbps MPEG Audio Layer 2 48-384kbps

**Encryption**

Type	Proprietary ABS 32bit
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**Control**

Unit	Joystick panel + OLED display
Remote	USB Control from PC GUI Application

**Physical**

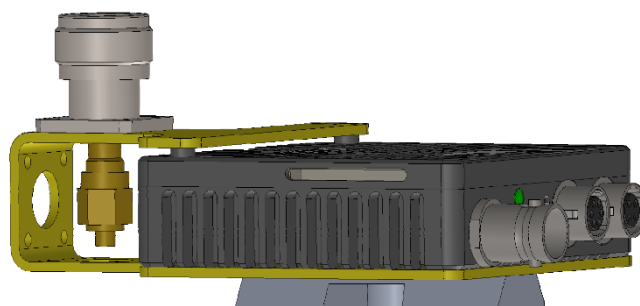
Dimensions	18x60x63.5mm (HxWxD)
Weight	125g

**Power**

DC Input	6 to 17V reverse polarity protected
Power Consumption	HD encoding – 7.5W worse case with 100mW RF

**Environment**

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



*BWS NanoPRO fitted with optional camera mount bracket*