



FEATURES

Ultra small size for body-worn and FPV drone applications

50mW DVBT COFDM transmission

Low latency H.264 and HEVC transmission

Resolutions to 1080p60

Analogue and embedded audio inputs

UHF Return camera control

DBS PicoTXR / PicoTXR-HDMI

The DBS PicoTXR is an ultra-miniature COFDM digital video transmitter, designed specifically for body-worn and miniature drone applications.

The DBS PICO TXR facilitates the transmission of broadcast quality video in an exceptionally small package. Offering COFDM transmission at 50mW and progressive format video encoding in H.264 or HEVC, the DBS PicoTXR has a volume of only 2.5 Cm³ and consumes less than 4.5W when transmitting 1080p60 at full power.

The exceptionally small size of the PicoTXR allows it to be body-worn mounted, or fitted to the smallest FPV drones. This allows production teams to offer stunning high definition images that were not previously possible.

The PicoTXR can be supplied with optional HDMI interfaces and also a dedicated light weight body worn camera. Camera control is achieved through a built in UHF return link.

The Pico TXR-HDMI is an even smaller unit with all the same features apart from the SDI input. The SDI unit can accept HDMI via an expansion board while the HDMI unit accepts HDMI directly with a micro HDMI connector.

Connectors

TX	MMCX
RX	MMCX
SDI	MMCX
USB	USB-C
CTRL	Molex 1mm PICO Lock 6 way
Expansion	60 way expansion connector

RF

Frequency	2.0-2.7, 5.5-6.0GHz HDMI Tri-band version 2.0-2.5, 4.9-5.1, 5.1-6.0GHz
Power	50mW (17dBm)
Modulation	8/7/6MHz DVBT
Bitrate	18Mb/s max

Video

Input	HD-SDI (1.5 and 3G) optional HDMI
Encoding	HEVC / H.264, 8bit
Resolutions	720p, 1080p 30 / 50 / 59.94 / 60Hz
Latency	Standard 300-400mS, Low <120mS

Audio

Input	Analogue Line Level, MIC Level, MIC+BIAS, SDI Embedded
Compression Type	MPEG Layer 2

Control

Interface	USB and Bluetooth
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User Data

Interface	RS485
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Physical

Dimensions	55 × 38 × 17mm inc. fan
Weight	52g
Mounting	3mm Mounting holes

Power

USB-C	5V
Power In	5.2-9.1V or 5.2 – 16V Rev B (Mar 2025)
Consumption	<4.5W at 1080p60

Return Channel

Frequency	450-480MHz or 902-928Mz
Protocol	CyanView Compatible

Order Codes

PICOHEVC-TXR-200270	2.0-2.7GHz inc. fan assembly
PICOHEVC-TXR-550600	5.5-6.0GHz inc. fan assembly
PICOTXR-HDMI	Optional HDMI Interface
PICOHEVC-TXR-HDMI-TRI	Miniature HEVC HD TX 50mW, HDMI input tri-band; 2.0-2.5, 4.9-5.1, 5.1-6.0GHz inc. fan
PICO-DTX-450480	PICO Data Transmitter 450-480MHz
PICO-DTX-902928	PICO Data Transmitter 902-928MHz

