

TX C.206

Low Delay Digital COFDM Broadcast Transmitter

KERN



**Professional
Audio/Video
Transmission with
Ultra Low-Delay in a
Compact, Light-
weight Package**

Main Features

- ▶ Digital DVB-T COFDM Modulation with 100mW Output Power
- ▶ Worldwide Usable in License Free 2.4 GHz ISM Band
- ▶ CE-approved
- ▶ MPEG-2 Encoding (NTSC and PAL)
- ▶ Ultra-Low Delay: Approx. 40ms for any Format
- ▶ Digital (SDI) and Analogue (CVBS) Inputs
- ▶ Symmetric Stereo Audio Inputs (XLR)
- ▶ Separate and Detachable Control Panel with Backlight LC-Display and Clear-Text Menu System
- ▶ Compact and Lightweight. Easy to use. Plug and Play
- ▶ Advanced Security by Content Encryption with AES128 (Option)
- ▶ Optimal Combination with Diversity Receiver RX C.206

Applications:

By using state of the art DVB-T COFDM modulation and modern compression techniques, the TX C.206 transmitter provides superior performance in non-line of sight and high multipath applications. Ultra-low delay allows lip-synchronous recording of wireless video and ambient sound. Optional AES-128 encryption provides secure transmission without eavesdropping. It's very small dimensions and low weight together with the superior performance make the TX C.206 a perfect solution for the "First Mile", like e.g. outside broadcast (ENG), mobile and airborne applications.

Specifications

Video Specifications:

Serial Digital Input (SDI):

SMPTE 259M, 270 Mbit/sec, 525@30i or 625@25i, 1x BNC 75 Ω

Composite Video (CVBS):

Composite 1Vpp, Adjustable Gain, NTSC or PAL B/G , 1x BNC 75 Ω

Audio Specifications:

Analog Audio Input:

Symmetric Stereo, Line Level, 2x XLR connectors (w/ adaptors)

Encoding Specifications:

System Encoding:

MPEG-2 Transport Stream according to ISO/IEC 13818-1, 5..21 Mbit/sec (determined by COFDM Modulation)

Video Encoding:

MPEG-2 Video according to ISO/IEC 13818-2, 4..15 Mbit/sec (determined by COFDM Modulation)

Audio Encoding:

MPEG Audio Layer II Stereo Encoding according to ISO/IEC 11172, 2 channels, 16 bits, 48 kHz, 256 kbit/sec

End-to-End Latency:

≤ 40 msec in Low-Delay Mode together with RX C.206 Receiver

Encryption (Option):

128bit Advanced Encryption Standard (AES128) according to FIPS 197

RF Specifications:

COFDM Modulation:

QPSK, QAM16, 2k Mode
selectable Bandwidth: 6, 7, 8 MHz
selectable FEC: 1/2, 2/3, 3/4, 5/6, 7/8
selectable Guard Intervals: 1/32, 1/16, 1/8, 1/4

RF Output:

100 mW, 1x female connector type N, 50 Ω

Frequency Range:

2.350...2.550 GHz, adjustable in 500 kHz-steps

Physical Specifications:

Dimensions/Weight:

195 x 110 x 48 mm, 850 g (body w/o battery mounts and connectors)

Operating Conditions:

-20...+50 °C, 90% humidity long term, 6'000 m altitude

Power Supply:

10...24 V DC, 12 W, over Battery Mount

Control Panel:

Features:

2 lines x 16 characters backlight LCD, Status LEDs, "On Air"-LED, Membrane Keyboard

Dimensions/Weight:

130 x 110 x 34 mm, 300 g

Compliance:

CE approval:

CE 78 100 5682 !

Additional:

Battery mounts:

Anton Bauer or Sony V-Mount on both sides.

Camera power supply:

Via battery on transmitter due to power "loop-through" function

