

TX C.100

Digital COFDM Video/Audio Broadcast-Transmitter

KERN



**Professional
Audio-/Video
Transmitter
in rugged
Aluminum Housing**

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, supporting NTSC and PAL
- ▶ Digital- (SDI), Analogue- (CVBS), RGB- as well as YCbCr- Inputs
- ▶ Symmetric Stereo Audio Inputs
- ▶ Backlight LC-Display and Clear-Text Menu System
- ▶ Compact and rugged Housing
- ▶ Optimal Combination with Diversity Receiver RX C.100

Applications:

By using state of the art DVB-T COFDM modulation and modern compression techniques, the TX C.100 transmitter provides superior performance in non-line of sight and high multipath applications. It's small dimensions and the superior performance make the TX C.100 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/s, 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
RGB	3 x BNC
YCbCr	3 x BNC

Audio Specifications:

Analog-Audio Input:	Symmetrisch Stereo, Line Level, 2x Lemo Triax sockets
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Encoder Specifications:

System Encoding:	MPEG-2 Transport Stream according ISO/IEC 13818-1, 5..17,5 Mbit/s (determined by COFDM Modulation)
Video Encoding:	MPEG-2 Video according ISO/IEC 13818-2, MP@ML 4..14 Mbit/s (determined by COFDM Modulation), selectable picture mode: I, IP, IPB, IBBP
Audio Encoding:	MPEG Audio Layer II Stereo Encoding according ISO/IEC 11172, 2 channels, 16 bit, 48 kHz, 256 kbit/s
End-to-End Latency:	≤ 400 ms together with RX C.100 Receiver

RF Specifications:

COFDM Modulation:	QPSK, QAM16, 2k-Mode selectable FEC: 1/2, 2/3, 3/4, 5/6, 7/8 selectable Guard Intervall: 1/32, 1/16, 1/8, 1/4
RF Output:	100 mW, 1x N-type, 50 Ω
Frequency Range:	2,350...2,550 GHz, adjustable in 500 kHz-steps

Physical Specifications:

Size/Weight:	195 x 110 x 48 mm, 997 g (body w/o connectors)
Operating Conditions:	-20...+50 °C, 90% humidity long term, 6'000 m altitude
Power Supply:	10...24 V DC, 12 W (3 pin Binder)

Operation:

Feature:	2 lines x 16 characters backlight LCD, status LEDs, dedicated "On Air" (RF output) button
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Compliance:

CE:	CE 78 100 5682 !
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