

Breeze

Low Power DAB Transmitter



Key features:

- Built-In AGC
- Linear and Non Linear digital adaptive precorrections
- ETI & EDI inputs
- Sat/GSE built-in demodulator
- Seamless switching incl. Sat/EDI/ETI
- Full DAB modes, MFN/SFN
- Onboard GPS
- Up to 20W output
- Web GUI & SNMP

Key Benefits

- Top class of RF signal performances
 - Reduced-depth 2U rack
- Cost-effective solution (Design-To-Cost)
 - All-on-front connectors configuration
- Cutting Edge Digital Adaptive Precorrection algorithm
 - Multiple streams including Sat/GSE, EDI & ETI

Description

BREEZE has been specially design to meet broadcasters' demand for extending their network service coverage.

BREEZE low power DAB transmitter represents the latest evolution of the TeamCast product families. It inherits of more than 20 years experience in DAB standard, modulators design and manufacturing as well as efficiency optimization. This all-in-one transmitter is compliant with DAB, DAB+ and DMB standards. It is able to provide an output power from 1W to 20W.

BREEZE original design has been inspired by telecom world where reduced depth and easy access to connectors are top requirements. It comes as an ultra-

compact 2U 19" rack featuring all-in-front connectors. Thanks to its multiple input interfaces (ETI, EDI and satellite inputs) and its ability to operate in SFN or MFN mode, BREEZE is able to answer any network architecture requirements. As it embeds the TeamCast latest cutting edge adaptive precorrections algorithm, BREEZE provides a high level RF output.

As any transmitter, BREEZE integrates all needed measurements such as forward and reflected powers, MER, IMD as well as protection mechanism to prevent any damage.

BREEZE is controlled using friendly WEB GUI and front panel LCD as well as remotely using SNMP.



info@
theradiohub.com



Connectors



Specifications¹

Standards

- DAB Transmission: EN 300 401 v1.4.1
- DMB Services: EN TS 102 428 v1.1.1
- ETI Interface: ETSI ETS 300 799 v1.5.1, ITU-T Recommendation G.703, G.704 and G.823 (jitter)

ETI Stream Interfaces

- 2x G703 input connectors – BNC 75 Ω
- NI(G703), NA5376(G704), NA5592(G704)
Automatically detected
- 2048 kbps ± 50ppm
- 1x ETI output connector - SMA 75 Ω

Satellite Demodulator (Option)

- 1x input (from 950 MHz to 2150 MHz) – SMA 75 Ω
- Sensitivity from -62 dBm to -25 dBm
- Standards: DVB-S and DVB-S2
- GSE Encapsulation (TS 102606)
- Sat. Loop output for daisy chaining

Gigabit Streaming Inputs (Option)

- 2 x 10/100/1000 base-T - RJ45
- Protocols: IP, RTP, UDP, IGMP (V2 & V3)
- VLAN ID (1 to 4094) - IEEE 802.1q
- EDI Encapsulation (TS 102 693)

RF Outputs

- VHF Band III output: 174 MHz up to 240 MHz, 1Hz step
- up to +43 dBm (20W) – N connector 50 Ω
- High MER: 38dB @ 15W (typical after precorrections)

Monitoring

- SNR, left & right shoulders, forwarded & reflected powers

Clock and Synchronization

- 10 MHz & 1 PPS input/output
- Onboard GPS/GLONASS (option)

DAB Stream Process and Modulation

- DAB Mode I, II, III and IV
- MFN and SFN operation
- Test modes: 3G, In-channel PRBS, sine waveform

Digital Adaptive Precorrection

- Linear DAP: Amplitude ±3 dB, Delay 0 to 3μs
- Non Linear DAP: Phase ±180°
- Crest Factor Reduction (PAPR) and Protection clipping
- 1 x RF feedback inputs for Linear DAP:
-15 dBm to -5 dBm, SMA connector 50 Ω

Control & Monitoring

- 2 x 10/100/1000 base-T Ethernet port
- Customizable Web GUI and SNMP
- LCD Front Panel Display
- 2 x GPIn for external trigger
- 6 x GPout for external alarms (5 user configurable GPout)

Physical

- Dimensions: (D x W x H) 350 x 483 x 88 mm (2RU)
- Weight: 9.5 Kg
- Operating temperature range: 0°C to 50°C
- Power supply: 90 to 240 VAC - 50 Hz

Ordering Information

XTTR-BZ10-5422	Low Power DAB Transmitter - with VHF Band III output (up to 43dBm), DAP and onboard GPS
XTTO-BRZ0-SATI	Satellite/GSE input software license for BREEZE
XTTO-BRZ0-EDIP	EDI/IP input streaming software license for BREEZE
XTTO-BRZ0-EGPS	GPS software license for BREEZE

¹ Specifications are not contractual and are subject to revision without notice.

The Radio Hub

www.theradiohub.com

info@theradiohub.com

