

BST26-010 BROADBAND BASE STATION TRANSCEIVER

- **Solid-State Design for LMDS Applications**
- **Compact Outdoor Package**
- **QPSK, QAM or COFDM Capability**
- **Single Antenna for Transmit and Receive**



PRODUCT APPLICATION:

The BST26-010 is a solid-state transceiver designed to provide P-T-MP (point-to-multi-point), full duplex (two-way) communication with QPSK, QAM or COFDM modulated carriers (FDMA multiple carrier regime) in the 26 GHz frequency band.

The BST26-010 consists of an outdoor transceiver and an indoor Interface Processing Unit (IPU). The outdoor transceiver features a modular design consisting of integrated transmitter, receiver and diplexer modules. The high performance diplexer makes it possible to use the transceiver with a single antenna. The outdoor transceiver package is mechanically integrated with the antenna to provide a low-loss connection and to facilitate installation, mounting and antenna aligning.

The indoor IPU is a rack mounted chassis that provides frequency conversion, reference oscillator, and AC power to the outdoor transceiver. Downstream transmission is in the 24 - 25 GHz band and upstream reception is in the 25 - 26 GHz band.

Test points are provided to monitor output signal level, IF input levels and crystal oscillator reference frequency. Diagnostic voltages are provided for local or remote monitoring.

Product Specification¹



Transmitter Section	
Input Frequency ² :	950 to 1450 MHz
Modulation Format:	QPSK, 16-QAM, 64-QAM, COFDM
Gain IF to RF:	35 dB
Output Level:	27 dBm max (Single QPSK Carrier)
Output Frequency ² :	Max 500 MHz spectrum within 24 to 25 GHz band
Receiver Section	
Input Frequency ² :	Max 300 MHz spectrum within 25 to 26 GHz band
Noise Figure:	6 dB
Gain:	40 dB
Output Frequency ² :	400 - 700 MHz
Common Specifications	
Frequency Response:	±1 dB
Frequency Stability:	± 2 ppm
Input Return Loss:	15 dB
Output Return Loss:	18 dB
RF Connectors:	WR-42 Waveguide
Input/Output Connector:	Type "N"
Mounting:	Outdoor mount to vertical pipe
Temperature Range:	-40° to 113°F (-40° to 45°C)
Humidity:	100%
Primary Power:	110/220 VAC, 50/60Hz (per customer specification)
Weight:	10 lb. (4.5 kg)
Dimensions:	20cmW x 20cmH x 15cmD (8" x 8" x 6")

¹ Specifications subject to change without prior notice.

² Other frequencies available.