

1.0 GENERAL INFORMATION

1.1 System Overview

The BST1918 combines low noise high power transceiver(s) and sophisticated management capability to offer a radio solution for 1.9 GHz **BWIN™ BASED ON DOCSIS™** base stations. Out-of-band signaling over the single cable connection with the VCom BST1918 allows for full SNMP management (via the WM4040) of the operational parameters. Built-in power detectors allow for easy input and output level configuration.

1.2 BST1918 Features

- High output power: +31 dBm carrier level with 64QAM
- Automatic transmit power control automatically corrects for cable loss and input level changes
- RF output mutes when changing output configuration or in a switchover situation
- Low noise: <4 dB including duplexer loss
- Digital temperature compensation to guarantee specifications over full operating temperature range
- All local oscillators are frequency synthesized and locked to a common high stability reference from the WM4040
- FLASH memory for easy software updates
- Externally connected antennas (60°, 90°, 120°, Omni)
- High reliability, state-of-the-art design using microstrip, MMIC and surface mount technology
- Conservative component derating and 100% burn in help ensure reliable operation

Full SNMP management when combined with the WM4040:

Monitors	Controls	Alarms
Transmit IF Level	RF Output Power Setting	Phase Lock Lost
Transmit RF Level	RF Output Power Mode (closed-loop power control, open loop gain control)	Overheating
Receive IF Level	RF Output Mute	Loss of Transmit IF
Internal Temperature	Receive Gain	Transmit RF Level
Module Serial Numbers		
Transmit Phase Lock		
Receive Phase Lock		