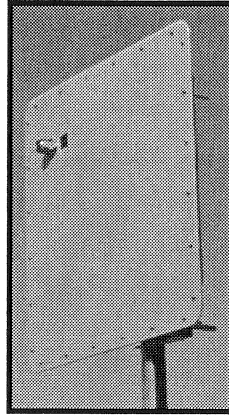


**VCom**

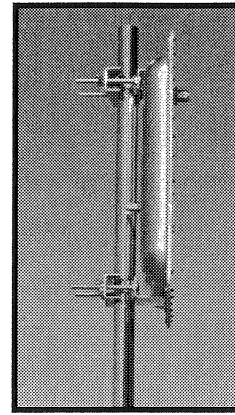
The ~~WaveCom~~ **BTR5857** is a low cost 5.7 to 5.8 GHz Base Station Outdoor Unit (ODU) for use with TRI5758 in broadband fixed wireless systems.

The BTR5857 cost and performance makes it ideal for both point-to-point and point-to-multipoint systems.

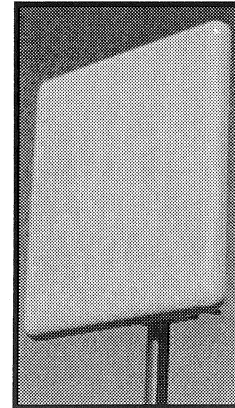
The BTR5857 combines a low noise downconverter, high power upconverter and high rejection duplexer to offer a quick and easy to install base station ODU for BWIN<sup>TM</sup> BASED ON DOCSIS<sup>TM</sup>.



Front  
(no antenna)



Side  
(no antenna)



Front  
(comes with  
integrated antenna)

## Product Features:

- Up to +15 dBm output power with 64QAM; +20 dBm with QPSK
- Digital temperature compensation - guarantees specifications over full operating temperature band
- High reliability, state-of-the-art design using microstrip, MMIC and surface mount technology
- Can be used with an external antenna or an integrated antenna for point-to-point systems.

**VCom**

~~WaveCom~~ Inc.

150 CARDINAL PLACE

SASKATOON, SK, CANADA S7L 6H7

TEL: (306) 955-7075

FAX: (306) 955-9919

Distributed by:

Specifications subject to change without notice - Printed in Canada

br\_btr5857\_01 (Mar 2003)

**BTR5857**  
BASE STATION TRANSCIVER

## SPECIFICATIONS

## BTR5857

### Base Station Transceiver

#### TRANSMIT SPECIFICATIONS

|                                     |  |
|-------------------------------------|--|
| IF Input Frequency                  | 516-540 MHz  |
| Bandwidth                           | one or more RF carriers (4 x 6 MHz)                                    |
| RF Output Frequency Range           | 5775-5799 MHz (Low Band Option)<br>5799-5823 MHz (High Band Option)    |
| Frequency Response (any 6 MHz band) | ± 0.3 dB   |
| Rated Output Power at Antenna Port  | +15 dBm (64QAM); +20 dBm (QPSK)  |
| Spectral Mask                       | Compliant with ETSI EN 301 021 v1.5.1, section 5.3.3,<br>system type D |
| Phase Noise                         | <-85 dBc/Hz @ 10 KHz   |

#### RECEIVE

|                                     |   |
|-------------------------------------|---|
| RF Input Frequency Range            | 5727-5751 MHz (Low Band Option)<br>5751-5775 MHz (High Band Option) |
| Frequency Response (any 6 MHz band) | ±0.3 dB   |
| IF Output Frequency Range           | 18-42 MHz   |
| Noise Figure at Antenna Port        | <6 dB including duplexer loss                                       |
| Gain                                | 38 dB   |
| Phase Noise                         | <-85 dBc/Hz @ 10 KHz  |

#### GENERAL

|  |   |
|--|---|
| Frequency Setting and Stability over Temperature | ± 15 kHz  |
| Frequency Setting and Stability over 10 years    | ± 25 kHz  |
| IF Connector                                     | F female, 75 ohms   |
| RF Connector                                     | N female, 50 ohms   |
| Return Loss                                      | 10 dB   |
| Power Requirement                                | 12 to 28 VDC (+21 V to +28 V nominal)   |
| Power Consumption                                | 12W maximum   |
| Operating Temperature Range                      | ETS 300 019 Class 4.1 (-30 to +40°C ambient) full specifications<br>ETS 300 019 Class 4.1E (-45 to +45°C ambient) operational       |
| Antenna Beamwidth                                | 60°, 90°, Omnidirectional available   |
| Antenna Compliance                               | ETSI EN 302 085   |
| Spurious Emissions                               | ETSI EN 301 390, FCC Part 15, Industry Canada RSS-210   |
| EMC Compliance                                   | ETSI EN 300 385   |
| Mounting   | Standard - Pole (1" to 1.75" (25mm to 44mm) diameter)<br>with polarization, azimuth, elevation adjustment.<br>Optional - wall mount |
| Dimensions                                       | 12" x 12" x 2.5" (305 mm x 305 mm x 64 mm) maximum  |
| Weight   | 5.5 lbs. (2.5 kg)   |

#### SYSTEM CONFIGURATIONS

|                               |  |
|-------------------------------|--|
| BTR5857-T5775_5799-R5727_5751 | Outdoor 5.7 GHz Base Station Transceiver<br>Low Band (Transmit: 5775-5799 MHz,<br>Receive: 5727-5751 MHz)  |
| BTR5857-T5799_5823-R5751_5775 | Outdoor 5.7 GHz Base Station Transceiver<br>High Band (Transmit: 5799-5823 MHz,<br>Receive: 5751-5775 MHz) |

150 CARDINAL PLACE, SASKATOON, SK S7L 6H7  
TEL: (306) 955-7075 FAX: (306) 955-9919

The DOCSISTM acronym belongs to CableLabs®

Specifications subject to change without notice. - Printed in Canada.

br\_bst3500\_01 (Mar 2003)