

MDS / MMDS Two-way Transverter

PM8103 MDS/MMDS Transverter -- Customer Premise Equipment

The PM8103 is used in combination with the ModemMate (PM8153) and power supply (PS8183) to provide the two-way RF / Microwave conversions, filtering, and amplification at the customer's location. It is designed for use with a variety of cable modems from several manufacturers. Various antenna options are available to optimize the signal-to-noise ratio at the CPE site. Integrated diplexers on both the RF and IF ports minimize installation time, cost, and complexity.

Typical Operating Characteristics

| Downstream (Receive) | Upstream (Transmit) |
|-----------------------|---------------------|
| 2500-2690 MHz | - |
| 222-412 MHz | - |
| - | 116-128 MHz |
| - | 2150-2162 MHz |
| -40 to 70°C | |
| Supplied by ModemMate | |
| 0 to 100% | |

Typical Electrical Specifications

| Downstream (Receive) | Upstream (Transmit) |
|----------------------|--|
| 34.5 dB at 25°C | 35 dB at 25°C |
| 3 dB full band | ±0.5 dB full band |
| ±0.25 dB / 6 MHz | |
| - | ±22 dBm ^{1/} (plus antenna gain) |
| +20.7 dBm | +25 dBm |
| >100 dB | - |
| @ 2720 MHz >10 dB | |
| @ 2760 MHz >30 dB | |
| @ 2800 MHz >50 dB | |
| - | -60 dBc |
| - | -60 dBc |
| - | -60 dBc |
| No | Yes ^{2/} |
| 2278 MHz | |
| ±10 kHz maximum | |

^{1/} At -40 dBc adjacent channel interference

^{2/} Re-inverted by the Transverter for a net system non-inversion

PACFS00051

Typical Electrical Specifications

| | |
|---|--|
| EO Phase Noise 10 kHz offset | -90 dBc/Hz maximum |
| Antenna Type | Planar Array or Reflector and Dipole |
| Modem Make to Transceiver Connection | RG-6, RG11, or RG-59, 75W |
| RF Connector | 10 dB loss maximum at 128 MHz F connector, female, 75 Ω |
| RF Connector | N connector, female, 50 Ω |
| Power Requirements (supplied by the equipment) | 8 watts nominal |

Mechanical Specifications

| | |
|------------|-------------------------|
| O-Ring | O-Ring |
| Mounting | 1-2" pole or wall mount |
| Quickmount | Quickmount |
| Height | 9" |
| Depth | 2.25" |
| Width | 6.125" |
| Weight | >5 lbs |
| Packaging | 10 units per carton |

Pacific Monolithics products are covered under one or more of the following US Patents: 5,280,412; 5,301,081; 5,317,291; 5,357,229; D347,437; D363,288; D361,067; D361,068; other patents pending. Specifications subject to change without notice.

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