

## **CPE28TR-001 CPE TRANSCEIVER**

- **Subscriber CPE Transceiver for LMDS Applications**
- **Compact Outdoor Package**
- **Single-Cable Connection to the Indoor Modem**
- **DOCSIS and DAVIC Interface Frequencies**



### **PRODUCT APPLICATION:**

The CPE28TR-001 (Customer Premises Equipment) Transceiver is a two-way, full duplex (transmit and receive) outdoor RF unit designed for digital video and LMDS applications.

The transceiver features a solid state modular design consisting of block downconverter, transmitter and diplexer modules.

The receiver module has an input frequency in the 27 to 31 GHz range and output IF frequencies compatible with either DOCSIS (VHF and UHF) or DAVIC (L-band) standards. The transmitter module input frequency range is in the 45-65 MHz band and the output in the 29 to 31 GHz band.

A single cable provides the interconnection with the subscriber indoor modem unit, and also provides DC power to the transceiver.

The transceiver outdoor package is mechanically integrated with several antennas depending on the system gain requirement to provide a low-loss connection and to facilitate installation, mounting and alignment.

The unit is equipped with mounting hardware that facilitates installation in either horizontal or vertical antenna polarization.

# Product Specification<sup>1</sup>



<b>Transmitter Section</b>	
Input Frequency <sup>2</sup> :	45 to 65 MHz
Modulation Format:	QPSK or 16 QAM
Input Level:	Up to +9 dBm
Output Level (Nominal):	17 dBm
Output Frequency <sup>2</sup> :	29 to 31 GHz
Frequency Response:	±1.5 dB
<b>Receiver Section</b>	
Input Frequency <sup>2</sup> :	27 to 29 GHz
Input Level:	<-30 dBm
Noise Figure:	6 dB
RF-IF Gain (Nominal):	25 dB
Output Frequency:	350 to 650 MHz
Frequency Response:	±1.5 dB
Frequency Stability:	± 2 ppm
Input Return Loss:	10 dB minimum
Output Return Loss:	10 dB minimum
Connector:	Type "F"
Temperature Range (Outdoor):	-22° to 112°F (-30° to 50°C)
Humidity:	to 100%
Primary Power:	+20 VDC to +36 VDC thru DC/IF "F" connector 16W max.
Weight:	2.8 kg
Dimensions:	25.4 cm x 25.4 cm x 27.9 cm

<sup>1</sup> Specifications subject to change without prior notice.

<sup>2</sup> Other frequencies available.