



THE LEONARDO II™

FEATURES

- Deploy wireless service in days
- High Data Transfer Rates
- Tx, Rx Channels can be selected
- Up-Converter, down-converter use LO rejection filters
- Noise and spurious frequency reduction
- Maintain constant IF power
- High frequency stability

WIRELESS CPE TRANSCEIVERS FOR INTERNET DATA, VIDEO AND VOICE COMMUNICATION

The Renaissance Wireless CPE Transceiver carries high-speed two-way data for applications needing fast Internet access, interactive television, video and voice communication, and telephone communication by providing upstream/downstream frequency translation between IF and RF frequencies in the 2.5 to 2.7 GHz range. This unit is DOCSIS compliant and is designed to accommodate other customer specified frequency plans through simple component replacement. The modular approach makes the design flexible to support other air interfaces such as MDS, WCS, and WLL frequencies. The system uses separate transmitter and receiver local oscillators that are phase locked to a highly stable crystal reference source for high frequency stability. The transmitter and receiver ports are maintained at constant power levels to overcome specific operating environmental conditions. The transceiver, deployed at customer sites at affordable prices, will deliver a transmitter output power of 17 dBm into the 50 ohm antenna port and provide a receiver IF output level of minus 30 dBm into a 75 ohm connector. Service can be point-to-point or scaled upward through point-to-multipoint applications for either rural or urban communities. The unit operates with 12 V, 850 mA DC power supply. Unit dimensions are 6" x 6" x 1."

| SPECIFICATION | TRANSMITTER | RECEIVER |
|-----------------------|-----------------|-----------------|
| RF | 2500 – 2560 MHz | 2620 – 2680 MHz |
| IF Band | 5 – 40 MHz | 44 – 860 MHz |
| Linear Gain | 30 dB | 30 dB |
| Gain Flatness | +/-3 dB | +/-3 dB |
| Gain Adjustment | +0 dB, -20 dB | — |
| P1dB | 26.0 dBm | — |
| Noise Figure | — | 4.5 dB |
| Out of Band Spurious | -55 dBc | -55 dBc |
| Harmonics | -55 dBc | -55 dBc |
| Impedance | N type 50 ohms | F type 75 ohms |
| DC Power | 12 V, 400 mA | 12 V, 275 mA |
| Operating Temperature | -30° to +70° C | -30° to +70° C |

Specifications subject to change without notice.