



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 2.1 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 WCS and WLL frequencies. The system uses 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, 675 mA DC power supply. Unit dimensions are 6" x 6" x 1.25."

SPECIFICATION	TRANSMITTER	RECEIVER
RF	2150 – 2162 MHz	2500 – 2686 MHz
IF	5 – 40 MHz	44 – 860 MHz
Linear Gain	30 dB	30 dB
Gain flatness	+/-3 dB	+/-5 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.