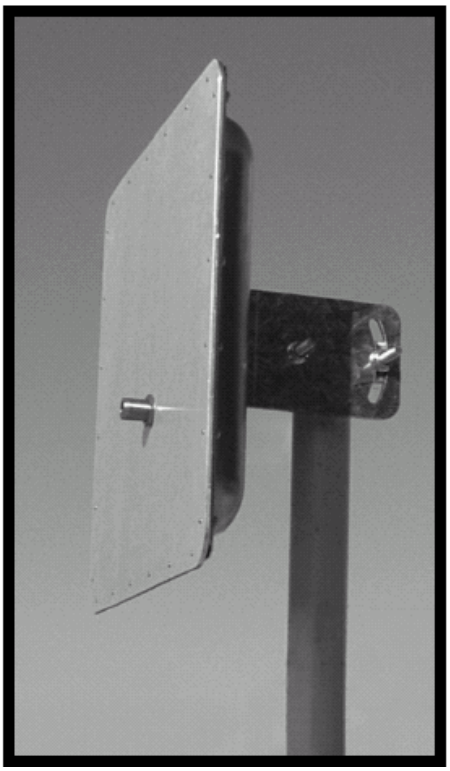
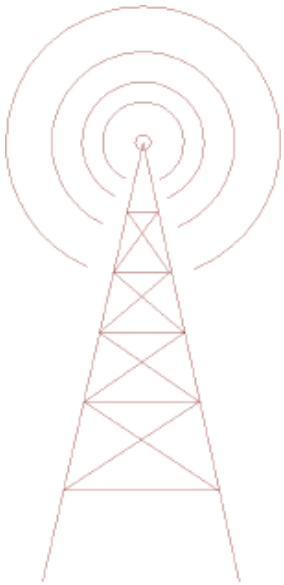
ARRIS Wireless Solutions
5.8GHz Base Station Transciever

Application
Provides a complete solution for transmit and receive side interfaces between a DOCSIS® compliant controller and the antennas.

Architectural Overview
The outdoor 5.8Ghz base station transceiver combines a low noise downconverter, high power transmitter and high rejection duplexer into a single unit solution for two-way wireless RF communications. The circuitry is field hardened over a broad temperature range and is contained in a weatherproof housing. The unit is connected to the indoor system by standard low cost RG-6 cable. The transceiver is configured to work with standard DOCSIS® cable modem frequency plans and allow for a near seamless connection to the WMTS. Based on the antenna selected, omni or multi sectored designs can be created.



- **+15dBm TX Power 64QAM**
- **Digital Temperature Compensation**
- **Embedded Microprocessor Control**
- **High Reliability Design**
- **Fully weatherized Enclosure**
- **Low Noise Receive**



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Specifications

Transmitter:	IF Input Frequency..... 516 to 540 MHz RF Output Frequency .....5775 to 5799MHz or ..... 5799 to 5823MHz Linear Output Power ....+20 dBm QPSK, +15dBm QAM64 Integrated Gain..... 30 dB Gain Flatness .....± .3 dB over 6 MHz Gain Stabiliy.....± 1 dB over temperature Phase Noise ..... <-85 dBc/Hz @ +/- 10 kHz Spectral inversion .....None Spurious.....-40dBm 9khz to 21.4GHz Spectral Mark.....ETSI EN 301 021 v1.5.1 section 5.5.3, Subpart D
Receiver:	Frequency..... 5727 to 5751MHz or ..... 5751 to 5775Mhz Gain..... 38dB ± 2 dB IF Output Frequency.....18 to 42MHz Gain Flatness..... ± .5 dB over 6MHz Noise Figure .....<6 dB max Phase Noise ..... <-85 dBc/Hz @ +/- 10 kHz typical
General:	Frequency Stability ..... ± 15 kHz Long Term Stability.....± 25 kHz over 10 years Connectors Antenna .....N Female 50 ohms Connectors IF .....F Female 75 ohms Return Loss ..... 10dB Power Consumption .....11 Watts Max Operating Voltage.....12VDV to 28VDC (24Vdc nominal) Operating Temperature Range ..... ETS 300 019 Class 4.1 (-30°C to +40°C) full specifications ETS 300 019 Class 4.1E (-45°C to +45°C) operational Spurious Emissions .....ETSI EN 301 390 EMC Compliance.....ETSI EN 300 385 Size..... 12" x 12" x 2.5" (305 x 305 x 64 mm) Mounting Pole 1" to 2.5" (25mm to 44mm) diameter pole Weight..... 5.5lbs (2.5 kg)

Ordering Information

5.8GHz Base Station Transceiver 5775 to 5799MHz TX.....620260

5.8GHz Base Station Transceiver 5799 to 5823MHz TX.....620268

Powering options:

Power Adapter and Inserter 115V 620213
Power Adapter and Inserter 220V 620219

Antennas:

Hub Antenna, Horz, 90 degree, 17dBi.....620262
Hub Antenna, Vert, 90 degree, 17dBi.....620263