

ARRIS Wireless Solutions

700MHz Base Station Transmitter



Application

The UHF transmitter is a solid state, fixed gain power amplifier for broadcast and fixed wireless applications in the UHF band. It can be factory-configured for operation anywhere within the 470 to 862 MHz band. Advanced design permits the operation with high-level digital signals such as 64QAM, DVB-T or 8-VSB DTV.

This device can be operated on a stand-alone basis, or controlled through SNMP or the front panel display by using a serial link with the UCD4940.

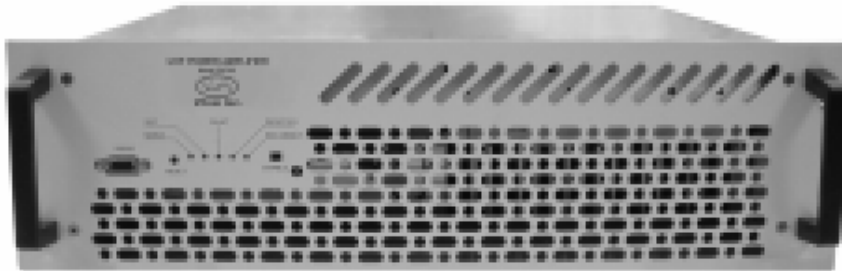
The combination of transmitter and the accessory WMTS interfaces offer a complete solution for up conversion, down conversion, and a high linearity transmitter in a 4U rack mount configuration*.

This advanced, cost effective power amplifier offers high performance, flexibility and space efficiency.

Features

- 80W typical transmit power with 64QAM or DVB-T modulation
- Alarms and automatic protection for RF faults, over temperature, overdrive, output VSWR, and over current
- Up to 140W transmit power for 8-VSB DTV
- Enable/disable via front panel switch or two-pole rear connector
- Monitor and control via RS232/RS485
- International switching power supply (100 to 240 VAC)

- **High output power up to 140 watts**
- **Optional Remote control and monitoring via RS232/RS485, Terminal or SNMP**
- **Automatic RF Fault Detection**
- **Rugged design**



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Specifications

RF:	Output Frequency (MHz)..... 470 to 862 (factory configuration required)
	Output Power 80 Wrms (64 QAM, >37 dB MER) 80 Wrms (DVB-T, with pre-correction)
 140 Wrms 8-VSB DTV
	Gain 56 dB ± 2 dB, fixed
	Gain Flatness ± 0.3 cB over 6 MHz
	Spurious
	Inband -55 dBc
	Out of band -55 dBc
	Input/Output Connectors N female, 50 ohms
	Input Return Loss 16 dB
	Output Return Loss 18 dB
	RF Monitor SMA female 50 ohms

Monitoring and Alarms:

Remote Control Interface	
Standalone	RS232 via DB9, RS485 via RJ45
With 620203,4	Front panel LCD push button, RS232/RS485, Terminal (RJ45) or optional SNMP over 10BaseT Ethernet
Status/Alarms	Enable, RF fault, Over temperature, Input Overdrive, Over current, Over VSWR
Monitors (with 620203,4)	RF Input Power, RF Output Power, Temperature, Supply Voltage, Automatic Protection Over temperature, Input Overdrive, Over VSWR, Over current
LED Indicators	Power Supply OK, Alarm, Enable

Physical:

Operating Temperature °F ().....	0 to 45°C
Storage Temperature °F (°C).....	
Operating Humidity (Min.-Max.) (Non condensing)	
Dimensions (H x W x D) in. (cm).....	5.25 x 17.25 x 18 (43.8 x 45.7 x 13.3)
.....	19"rack, 3 rack unit (RU) high
Weight pounds (kg).....	33 (15)

Regulatory:

Safety:.....	UL
EMC.....	FCC

Ordering Information

Transmitter:

Digital UHF Transmitter for 700MHz
Wireless Channel "C" Operation.. 620202

Filters and Duplexers:

700MHz Duplexer for Wireless Channel
"C" Omni Operation 620201

713 MHz Receive Filter 620206

743 MHz Transmit Filter 620207

Transmitter to WMTS RF Interfaces:

Transmit Up Converter and Receive
Down Converter..... 620203

Receive Down Converter..... 620204

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