

Model H-101

RF TRANSMITTER



SOLID STATE UHF TRANSMITTER

Harris' radio frequency (RF) product portfolio offers innovative solutions to challenging applications. These products are used as building blocks to integrate new RF systems, such as radars and direction finding systems, or to modernize aging systems that are experiencing obsolescence issues.

The H-101 RF Transmitter for UHF signals uses industry-proven transistor technology to produce a power peak greater than 7 kW. Based upon its robust solid-state design, this transmitter will:

- Improve the overall array efficiency
- Reduce array failure rate
- Provide a wide range of transmit capability with its high duty factor and high power

The transmitter module features manual phase and output power calibration with external controls to improve transmitter array performance. The transmitter module is air-cooled, simplifying the logistics of a large-array implementation. The transmitter's modular design supports either depot or site maintenance models.

Typical applications for the Harris solid-state UHF transmitter module include:

- UHF/D-TV
- FM/HDR/DAB radios
- Cell base stations
- Voice and data network stations
- Air navigation beacons
- Instrument landing systems



KEY FEATURES

- Modular design
- 360° output phase adjustment
- Gain adjust range over 7 dB
- High efficiency
- High duty factor capability
- Local forward and reflected power monitoring

ELECTRICAL SPECIFICATIONS

PARAMETER	MIN	MAX	UNIT
Operating Frequency	437	447	MHz
RF Peak Power Output	6		kW
RF Peak Power Output Stability		±0.2	dB
RF Peak Power Output Sensitivity (to Changes in Steering and Transmit Pulse)		1	dB
RF Output Frequency Response (Gain Variation)		0.75	
RF Output Phase Response		1	dB
RF Output Phase Adjustment Range	360		deg
RF Output Harmonic Content		-40	dBc
RF Output Spurious Content		-55	dBc

POWER REQUIREMENTS

PARAMETER	SYMBOL	MIN	TYPICAL	MAX	UNIT
AC Line Frequency			60		Hz
AC Line Voltage		110		125	VAC

ENVIRONMENTAL

PARAMETER	SYMBOL	MIN	TYPICAL	MAX	UNIT
Cooling Air Temperature		47		53	°F
Transmitter Weight				52	Lb

*Higher duty factor will require greater air flow.
Harris reserves the right to change specifications without notice.

About Harris Corporation

Harris Corporation is a leading technology innovator, solving customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world. Learn more at harris.com.

Harris Corporation SENSOR PROGRAM

4450 East Fountain Boulevard • Colorado Springs, CO USA 80916 • phone 1-719-637-5900

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