

High Power Radio Module

Model: HPRM850

Operation Instruction

Date: January 29, 2007

Version. 1.0

Ref#: FCC ID: S8L-100595HPRM

Industry Canada: IC: 2237F-RF100595

Introduction

This document presents description of the Andrew Corporation 850 Band HPRM (High Power Radio Module) amplifiers. The HPRMA850 amplifier is a high power, RF amplifier intended to provide signal amplification and conditioning. The HPRM850 amplifier is compatible with GSM and EDGE air interfaces operating in U.S. domestic cell sites where FCC compliance is mandatory.

The Cell band (869 MHz to 894 MHz) HPRM850 RF power amplifier is capable of amplifying a single carrier of different modulation types to a composite power level of 60Watts.

HPRM850 Specifications

The HPRM850 provide linear amplification of single-carrier signals in the cellular frequency band. The 850 Band HPRM850 has the following specifications:

Parameter	Specification
Operating RF Band	869-894MHz
In band RF gain	44dB
Input signal types	GSM or EDGE single carrier
Operational Bandwidth	25 MHz (38MHz for-20dB bandwidth, nominal)
Input / Output Impedances	50 Ohms
Input DC Power	+27 VDC, nominal
DC voltage input range	+26.5 to +27.5VDC
Rated Output Power @ +26.5 to +27.5VDC input	60W average GSM or 45W EDGE
DC-RF Efficiency	33%, rated output power, nominal input voltage
Physical dimensions	7.5" x 4" x 1.4"
Weight	< 2lbs
Cooling technique	The HPRM is a module to be mounted onto the customer heat sink within his frame. The module provides a copper pallet interface for thermal cooling by conduction.
Temperature Range	0°C to +60°C meeting specifications.

Table 1 HPRM850 Specifications

Installation and Operation Set-Up

The HPRM850 is easy to operate and use, only requiring a special cables for DC power and a multipoint connector to provide the ON/OFF state and biasing points to the module and report the monitoring to the system. RF input and output connections are done with industry standard MCX and QN connectors.

FCC Statements:

FCC ID: S8L-100595HPRM

This device complies with Part 2, 15, & 22 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning

Changes of modifications not expressly approved by the manufacturer could void the user's authority to operate the equipments.

Industry Canada Statements:

Industry Canada ID: IC: 2237F-RF100595

1. Quality Norms: The testing of the equipment is carried out as the norms stated in IC standards.

2. Labeling: HPRM850 when sold in Canada will have:

- (a) The certification number, prefixed by the term "IC: ", i.e. IC: 2237F-RF100595
- (b) The manufacturer's name, trade name or brand name, i.e. Andrew Corporation
- (c) A model name or number. Model Name = RF100595/NTN065JA
- (d) This device complies with RSS-131, RSS-102 of the IC Rules.

3. External Control

The HPRM850 does not have any external controls accessible to the user for any adjustments, to operate in violation of the limits prescribed in this Standard. Furthermore, information on internal adjustments, reconfiguration or programmability of the device shall only be made available to service depots and agents of the equipment supplier and NOT to the public.

4. Exposure of Humans to RF Field: The equipment conforms to RSS-102. RF Exposure compliance is also addressed at the time of licensing.