

**800MHZ LINEAR RF COMPENSATOR
MODEL # SYN8015A
USER MANUAL**

1. GENERAL

The 800 MHz Linear RF Compensator is a bi-directional RF amplifier. It is used to compensate for signal attenuation in cellular phones due to antenna and cable losses. The device operates in both analog (AMPS) and digital (CDMA & TDMA) modes.

2. ANTENNA INSTALLATION

Motorola recommends that the antenna be installed such that there is at least 20 cm of separation between the occupants of the vehicle and the antenna.

3. I/O CONNECTION

Portable and antenna port: mini UHF type connectors.
DC input and various control signals: 14-pin male connector.

4. SPECIFICATIONS

Operating Frequency	TX: 824-849 MHz RX: 869-894 MHz
Channeling	Single channel
Mode of Transmission	Analog & Digital
Data Source	External
Type of Modulation	AMPS (analog) CDMA (digital) TDMA (digital)
Type of Information	Telephony & Data
Occupied Bandwidth Requirement	AMPS: 30 KHz CDMA: 1.23 MHz TDMA: 30 KHz
Input Power	TX: 25 dBm max RX: 3 dBm max
Output Power	TX: AMPS: 28 dBm CDMA: 29.5 dBm TDMA: 31.2 dBm RX: 7 dBm

Harmonics & Spurious	FCC, TIA / EIA specifications
Stability	Less than 3:1 VSWR into 50 Ohm
DC Supply Voltage	9 to 16.5 V
Current Draw	1.5A max
RF Load VSWR	Full power at better than 2:1 VSWR
Operating Temp:	-30 to 60°C
Storage Temp	-40 to 90°C