MOTOROLA, INC. FCC ID: IHDA5ZK1

# 800MHZ LINEAR RF COMPENSATOR MODEL # SYN8015A REFERENCE SHEET

### 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

## **IMPORTANT:**

To meet the FCC's RF Exposure Guidelines, the antenna should be installed so there is at least 20 cm of separation between the body of the user or nearby persons 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 MOTOROLA, INC. FCC ID: IHDA5ZK1

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