MOTOROLA, INC. FCC ID: IHDA56AJ1

# 800 / 1900 MHZ DUAL BAND LINEAR RF COMPENSATOR MODEL # SYN8486A USER MANUAL

#### 1. GENERAL

The 800 / 1900 MHz Dual Band Linear RF Compensator is a bi-directional, dual band 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

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

1850-1910 MHz RX: 869-894 MHz 1930-1990 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: 27 dBm

CDMA: 27dBm TDMA: 27 dBm

RX: 3 dBm

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Harmonics & Spurious FCC, TIA / EIA specifications

Stability Any RF load condition

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