Manufactured under license from Motorola, Inc.

CYFRE™ CA-819

Direct Connect Amplifier

Why compromise reception?™

Dual Band Wired Amplifier for All North American 850 MHz & 1900 MHz Carrier Systems

(excluding iDEN Networks)

Cyfre™ Amplifiers seamlessly bridges RF amplification between Cell Towers and todays elaborate handsets without disrupting the carrier's tower management Networks. Thus, the entire Cyfre™ line of amplifiers becomes an integral part of all wireless network solutions.

Features / Benefits

- Carrier friendly in urban areas
- Increased revenue through customer retention
- Keeps customers connected to utilize the full potential of their phones and network services.
- Requires zero bandwidth from cell towers
- Communication only occurs through the RSSI of the handsets
- Increases data traffic & data speeds
- Case designed for Zero RF Emissions
- Less cell site build out

Network Compatibility

- Cyfre's™ creation of the Digital Microprocessor, combined with licensed Motorola patented technology, have achieved compatibility with the following standards.
- CDMA 2000, EVDO, EDGE, TIA/E-98-A&D, 1xRTT, TIA/EIA-690 Analog (dual-mode), IS-95-A&D, and GSM.
- Cyfre's™ cutting edge technology will change forever the perception all RF amplifiers are the same and deplete valuable bandwidth from tower management systems. Independent laboratories accredited by the FCC/IC regulators verify all Cyfre™ claims.

Six Sigma Certification

- Cyfre™ strives for the highest quality manufacturing standards possible. Cyfre™ products are manufactured under Six Sigma Certified Process Control Standards, far exceeding ISO 9001 and 9002 standards.

Made in the USA

The complete line of Cyfre™ amplifiers are manufactured in the USA

CA-819
Direct Connect Amplifier

Dual Band Wired Amplifier for All North American 800 MHz & 1900 MHz Carrier Systems (excluding iDEN Networks)

SPECIFICATIONS

Amplifier Kit Includes:

- Cyfre Bi-Directional Direct Connect Amplifier
- Exterior Vehicle antenna
- 12V Cigarette Lighter Adapter
- Ballistic Nylon Carrying Kit Bag
- AC/DC Power Adapter
- Hard Wire Power Cable

Frequency Specifications

Specifications	TX Uplink/Transmit	RX Downlink/Receive
Frequency Range:	824.0 – 849.0 MHz 1850.0 – 1910.0 MHz	869.0 – 894.0 MHz 1930.0 – 1990.0 MHz

Operating power maximum output measured at the RF terminal without connection to the antenna.

Uplink	806.0 – 821.0 MHz	(+27dBm CDMA)*
Downlink	851.0 – 866.0 MHz	(+3dBm)
Uplink	1850.0 – 1910.0 MHz	(+24dBm CDMA)*
Downlink	1930.0 – 1990.0 MHz	(+3dBm)

General Specifications

Input Voltage	8.0 VDC – 28.0 VDC	
Current draw	0.170 to 490 mah.	
Input Power	10 – 60mW	
Receiver Sensitivity	-110dBm (maximum)	
VSWR	less than 1.5 at the handset connection	
Signal Sensitivity	-115dBm (maximum)	
Temperature range:	*Operating*	-30 C to +60 C performing within specification -40 C to +90 C without loss of function
	Storage	-40 C to +90 C
Humidity	85% at +85 C	
Impedance	50 ohms	
Dimensions:	Length: 5.25 inches – Width: 5.1875 inches	Height: 1.0625 inches – Weight: 1 .55 lb (689 gm)
RF connector:	TNC Female	

Tested on the following standards which it meets or exceeds:
IS-95, IS-98, IS-2000, 1XRTT, GPRS, AMPS, CDMA, TDMA, GSM, GPRS, W-CDMA, W-GSM

FCC ID:	RFK-LMSWDJH819
IC:	5252A-CA819

Laboratory testing completed by:
DNB Engineering, Riverside, California; Rohde and Schwarz, Orlando, Florida

The specifications shown are subject to change at any time.
The company reserves the right to make changes without notice.
*Verified by Motorola Israel