

MFC/LCA Series

Modular active L-Band combiners

Made
in
Germany

GENERAL

The MFC/LSA series represents a high-quality and professional modular L-Band combining solution represented by the MFC main-chassis (MFC316R2A & MFC416R2A) and the corresponding LCA combiner-modules allowing L-Band signal combining from 4 to 16 inputs (see order information below) to one output. The LCA combiner-modules (4:1, 8:1, 16:1) can be inserted into the MFC main-chassis rear-side slots. The MFC Main-Chassis is equipped with 2 power-supply units assuring 1:1 hot-swappable power-supply redundancy and also has front-panel status LED's displaying the health status of each power-supply and inserted combiner-module. The LCA combiner-modules are available with 50Ohm SMA(f) or 75Ohm F(f) connectors (see order-information).



FEATURES

- Flexible modular L-Band combining solution
- Compact and space-saving 3 and 4RU/19" chassis
- Combiner-module slots at the rear of the chassis
- Various combiner modules available 4:1, 8:1 and 16:1
- Front panel status LED's displaying combiner-module and power-supply health status
- Alarm indication via front-side LED's and rear-side potential free error-contact (RS232 DB9-female)
- 1:1 redundant dual power supply (hot swappable)

CHASSIS ORDER INFORMATION

- **MFC316R2:** 3RU/19" Main-Chassis for
16 x 4:1 active Combiner-modules (LCA401R2EL)
- **MFC416R2:** 4RU/19" Main-Chassis for
16 x 8:1 active Combiner-modules (LCA801R2EL)
08 x 16:1 active Combiner-modules (LCA161R2EL)

SPLITTER-MODULE ORDER INFORMATION

In-/Output: 50Ohm SMA(f) connectors

- **LCA401R2EL:** 4:1 active combiner-module (fits 16x into MFC316R2 chassis)
- **LCA801R2EL:** 8:1 active combiner-module (fits 16 x into MFC416R2 chassis)
- **LCA161R2EL:** 16:1 active combiner-module (fits 8 x into MFC416R2 chassis)

In-/Output: 75Ohm F(f) connectors

- **LCA401R2EL-75:** 4:1 active combiner-module (fits 16x into MFC316R2 chassis)
- **LCA801R2EL-75:** 8:1 active combiner-module (fits 16 x into MFC416R2 chassis)
- **LCA161R2EL-75:** 16:1 active combiner-module (fits 8 x into MFC416R2 chassis)

TECHNICAL SPECIFICATIONS

- **Dimensions:** 3or 4RU/19", 300mm depth
- **Power supply:** 85...230V, 50/60Hz
1:1 redundant (hot-swap)
- **Power consumption:** <60W (fully loaded)
- **MFC Chassis splitter slots:** 16 (for max. 16 x LCA104/108)
08 (for max. 8 x LCA116)
- **Combiner module variants:** 4:1, 8:1 and 16:1
- **Frequency range:** 950...2150MHz
- **Input/Output connectors:** 50Ohm SMA(f) or 75Ohm F(f)
- **Isolation:** ≥ 25dB (50Ohm) / ≥ 20dB (75Ohm)
- **Insertion loss:** 0dB typ., ± 0,5dB max.
- **Frequency response:** ±0,5dB typ, < ± 1dB max.
- **1dB Compression:** ≤ +15dBm
- **Input Return loss:** ≥ -16dB typ.
- **Output Return loss:** ≥ -18dB typ.
- **IMA3 @ -10dBm:** < -56dBc
- **Noise figure:** ≤ 18dB
- **Potential free error cont.:** RS232 DB9-female
(status monitoring/alarming)
- **Status LED's:** PSU & module monitoring/alarming
- **Operating temperature:** 0...45°C
- **Storage temperature:** -10°C...70°C
- **Humidity:** 90% non-condensing
- **RoHS:** Compliant