

Wideband RF Power Amplifier

CRF-PA-30M512M-50WFrequency Range
30 - 512 MHzRated Output Power
50 WSupply Voltage
28 VDCPackage Size
125 × 59 × 21.5 mm

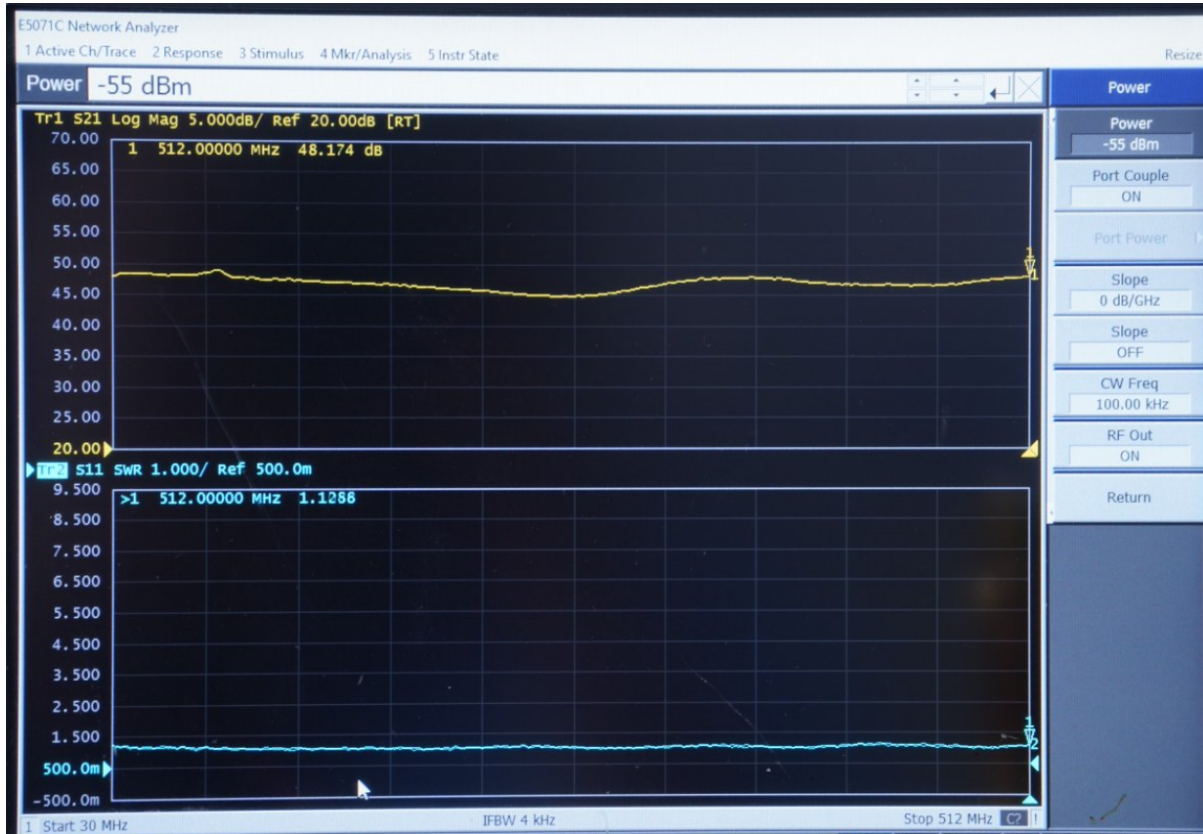
Electrical Characteristics

Test conditions: T_{case} = 25°C, V_{supply} per model, 50Ω system, unless otherwise specified.

| Parameter | Min | Typ | Max | Units |
|------------------------------|-----|--------------------|-------|-------|
| Frequency Range | | 30 - 512 MHz | | |
| Output Power | 50 | 50 | | W |
| Gain | 46 | 47 | 48 | dB |
| Gain Flatness | | | ≤ 1.8 | dB |
| Input Drive for Rated Output | 0 | | 8 | dBm |
| Harmonics | | -12 | ≤ -10 | dBc |
| Spurious | | | ≤ -60 | dBc |
| Input VSWR | | 1.3 | ≤ 1.8 | :1 |
| Output VSWR | | 1.5 | ≤ 2.0 | :1 |
| Supply Voltage | | 28 | | VDC |
| Current Consumption | | | ≤ 9 | A |
| Cooling Method | | Air Cooling | | |
| Output Power Type | | CW / Saturated | | |
| RF Input Connector | | SMA-Female | | |
| RF Output Connector | | N-Female | | |
| Operating Temperature | -40 | | +85 | °C |
| Storage Temperature | -40 | | +85 | °C |
| Dimensions | | 125 × 59 × 21.5 mm | | |
| Weight | | | ≤ 0.5 | kg |

Typical Performance Curve

Representative swept measurement of gain (S21) and input match / SWR (S11) versus frequency for the corresponding model.



Curve note: Tr1 corresponds to gain (S21, dB). Tr2 corresponds to input match / SWR (S11). Original uploaded instrument screenshot retained.

| | |
|--|---|
| <p>Applications RF testing / communication / system integration</p> | <p>Customization Custom frequency bands, connectors, control interfaces and integration details are available. CorelixRF engineering team can provide feasibility reviews within 48 hours.</p> |
|--|---|

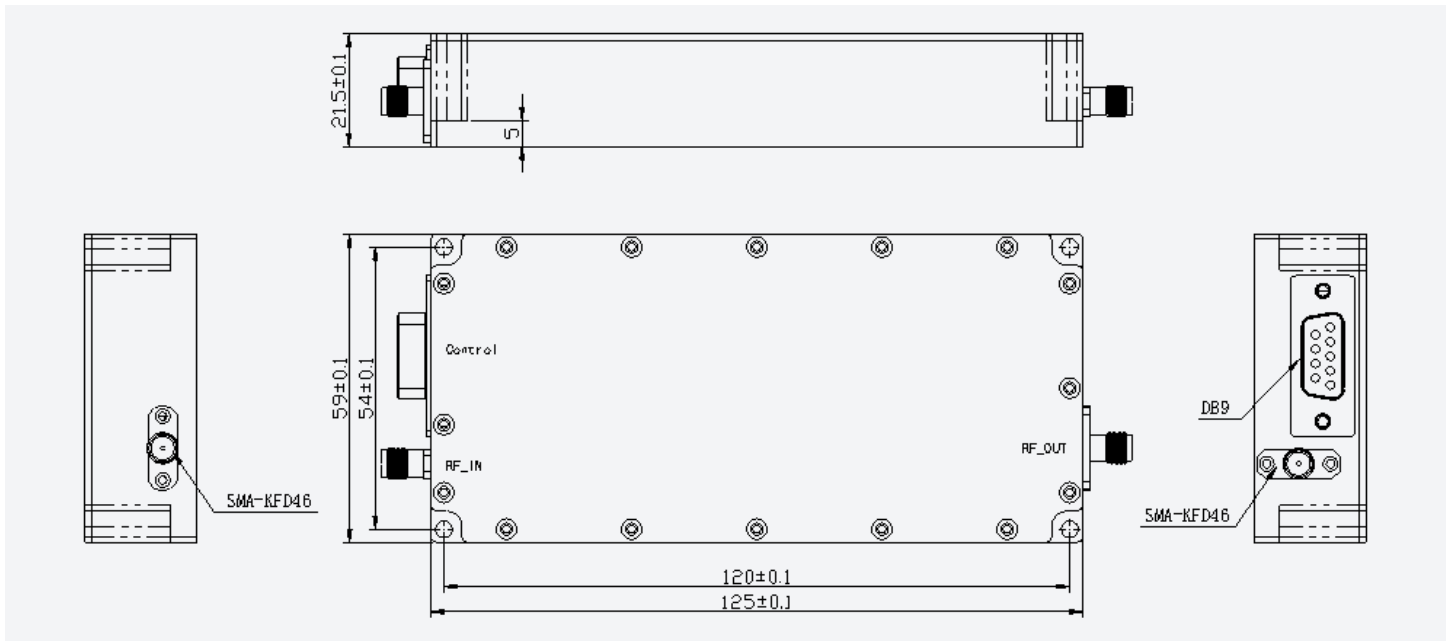
Compliance / Quality Framework

| | | | |
|-----------------------|-----------------|-----------------|------------------|
| RoHS Compliant | CE / FCC | ISO 9001 | GJB 9001C |
|-----------------------|-----------------|-----------------|------------------|

MTBF: Reliability data available on request. Environmental and validation data can be supplied for project review where applicable.

Mechanical Outline

Complete outline drawing shown below for clear integration reference.



| | | |
|--|---|--|
| Model CRF-PA-30M512M-50W | Package Size 125 x 59 x 21.5 mm | Weight ≤ 0.5 kg |
| Connector Reference RF IN: SMA-KFD46 RF OUT: N-Female Control: DB9 | Power Supply 28 VDC Current Consumption ≤ 9 A | Release Note Mechanical drawing is kept fully visible for easier dimensional review and connector location confirmation. |