



FM SOLID STATE LOW POWER AMPLIFIER

KFS 20000

Technical Characteristics

RF specifications:

Operating frequency range	87.5 ÷ 108 MHz
Max. output power	0 - 20000 W
Input power	0 - 1000 W
Input connector	N
Output connector	EIA 3+1/8" (others on request)
Power consumption (at maximum power)	26000 VA
Input and output impedance	50 Ω
Spurious and harmonic suppression (ref. to carrier)	< - 82 dBc
Synchronous AM (ref. 100% mod.)	< - 50 dB
Asynchronous AM (ref. 100% mod.)	< - 50 dB
RF Probe	-50 dBc, 50 Ω, BNC
Power stability	< 1%
RF efficiency (before the output filters)	80% typ.
Overall efficiency	65% typ.

Measures (on the front panel):

Total output forward power
Total output reflected power
Output forward power of each 1 kW module.
Output reflected power each 1 kW module.
DC supply voltage of each 1 kW module.
DC supply current of each 1 kW module.

Protections:

The internal logic circuitry provides proportional fold-back protection, without on-air interruptions, for:
- VSWR
- air over-temperature or insufficient cooling
- output combiner unbalancing
- fault of RF or power supply stage

Automatic power control:

The automatic power control circuitry provides the output power regulation with a precision of 2% over the whole band.
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Remote control interface:

I/O Connector	DB-25
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Monitored & controlled functions:

- stand-by
- Total forward output power
- Total reflected output power
- DC supply voltage of each 1 kW module.
- DC supply current of each 1 kW module.
- alarms status

AC Power requirements:

Type of DC voltage regulation	Switch-mode
Operating Voltage	110/220/240 Vac \pm 10% 50/60 Hz, single-phase or 380/415 Vac \pm 10% 50/60 Hz three-phase.

Operating conditions:

Cooling	forced air by internal fans
Service	Continuous 24/24 h
Operating temperature	-5 $^{\circ}$ \div +45 $^{\circ}$ C
Relative humidity	95%
Max.installation altitude	3000 m a.s.l.

Mechanicals:

Weight	930 kg
Dimensions (W x D x H)	627 x 1640 x 803mm – single rack

[Features and specifications subject to change without notice.](#)