

25 W FM MODULATOR/EXCITER KE 20



- **Suitable for digital audio.** FM exciter of last generation fully compatible with digital audio. In fact the amplitude and group delay linearity extended to the sub-sonic frequencies avoiding the low-frequencies overmodulation and phase distortion exalts the musical quality of digital audio. Even the musical quality of traditional analogic audio is emphasized.
- **0 ÷ 25 W** maximum output power continuously adjustable by external control. Ideal as stand-alone transmitter or versatile exciter for power amplifiers.
- **Frequency agile.** Instant internal (KE 20) or front panel (KE 20/C) frequency programmability with 10 KHz steps. No tuning or adjustments required.
- **Digital stereo coder.** High performances digital STEREO CODER BUILT-IN (/S option) with stereo separation (≥ 65 dB) and signal/noise ratio (≥ 80 dB) for a top sound quality.
- **Remote control.** Full remote control capability (/R option) with all main parameters in internal optional board. Power output adjustment, on/off, alarms reset, P fwd, Pref, frequency deviation measurement and alarms status are the main possibilities of remote control function.
- **Top quality sound.** The generated signal is characterized by an excellent signal/noise ratio and by negligible residual AM and FM. All this guarantees the best quality of the broadcast signal.
- **High frequency stability** in short and long terms is assured by Digital Phase Locked Loop circuit with low drift quartz. For better frequency stability the /HS option is available.
- **Deviation limiter.** Internal dynamic function limits the maximum frequency deviation according with the international requirements (CCIR, FCC, etc...). This is to avoid adjacent channels invasion in case of accidental overmodulation without reducing the modulation quality.
- **Electronic protections** in case of load mismatching (VSWR) or transmitting frequency error (LOCK). Every alarm event is displayed by front panel LEDs and can be resetted by manual or remote control.
- **Meters:** forward power, reflected power, frequency deviation, internal power supply voltage, L & R levels are continuously displayed by front panel meters.
- **Adjustments and settings.** Output power (PWR adj.), frequency deviation (DEV adj.), transmitting frequency (in KE 20/C), manual/remote function (in KE 20/RC), mono/stereo function (in KE 20/S) are front panel available for instant adjustment and setting.
- **Output low pass filter.** It assures a pure RF spectrum, according to the international requirements.
- **High efficiency** switching mode power supply gives greater reliability and reduce the power consumption.
- **Battery operation** is also available as (/VDC) option.
- **Meets or exceeds** international standards for safety and electrical specifications.

RF data	Output power	0/25 W adjustable
	Output impedance	50 Ω
	Output connector	N female
	Frequency range	87.5 ÷ 108 MHz
	Frequency setting:	
	KE 20	internal digiswitches
	KE 20/C	front panel digiswitches microprocessor controlled
	Standard frequency stability	± 1 kHz (± 300Hz with /HS option)
	Harmonic attenuation	< - 70 dBc
	Spurious emissions	< - 80 dBc
AF data	Mono operation:	
	Input level	-10 ÷ +12 dBm adj.
	Input connectors	XLR female/bal.
	Input impedance	600 Ω
	Bandwidth (± 0.25 dB)	20 Hz ÷ 15 KHz
	Pre-emphasis	50/75 μs
	Deviation from pre-emph. curve	± 0.5 dB
	FM S/N ratio (±75 kHz deviation at 1 kHz, 50 μs de-emph.)	≥ 80 dB
	THD + N	≤ 0.1 %
	19 kHz attenuation	≥ 50 dB
	AM syncro residual	< -64 dBc
	AM asyncro residual	< -68 dBc
	Stereo operation (MPX input):	
	Input level	-10 ÷ +12 dBm
	Input connector	BNC, unbal.
	Input impedance	10 kΩ
	Bandwidth (± 0.2 dB)	20 Hz ÷ 100 KHz
	FM S/N ratio (±75 kHz deviation at 1 kHz, demodul., 50 μs de-emphasis)	≥ 74 dB
	Stereo separation (20 Hz ÷ 15 kHz)	≥ 60 dB
	THD	≤ 0.1%
SCA/RDS operation	Standard SCA/RDS inputs	1 (other 2 with option /SCA3)
	Input connector	unbalanced, BNC
	Input impedance	10 kΩ
	Input level with 10% modulation	2.2 Vpp
	Bandwidth (± 0,25 dB)	40 ÷ 110 kHz
Stereo Coder characteristics (opt.)	Input connectors (L&R)	XLR, bal.
	Input impedance	600 Ω
	Input levels	-10 ÷ +12 dBm
	19 kHz attenuation	≥ 55 dB
	Bandwidth (± 0.25 dB)	20 Hz ÷ 15 KHz
	S/N ratio (±75 kHz dev. at 1 kHz, demodul., 50 μs de-emphasis)	≥ 80 dB
	Stereo separation (20 Hz ÷ 15 kHz)	≥ 65 dB
	THD	≤ 0.03%
Remote control characteristics (opt.)	It permits to make remotely the following operations:	
	- output power adjustment	
	- protections reset	
	- mono/stereo switch	
	- on/off switch	
	- forward and reflected power metering	
	- power supply voltage of RF final stage metering	
	- input audio levels metering (L&R)	
- frequency deviation metering		
Metering	Forward and reflected power, Vpa, MPX, Left e Right, frequency deviation.	
Options	S	Internal stereo coder
	/C	external frequency setting
	/RC	remote control interface
	/HS	frequency stability ± 300 Hz
	/SCA3	3rd SCA/RDS inputs
	/VDC	battery operation

Features and specifications subject to change without notice.