The MOT 20000 FL B.III-IV-V is a 20KW TV transmitter made up of the MOT 100 FL modulator/transmitter, and twelve S2000 TV amplifiers designed with LDMOS technology. The option of independent operation in case of emergency is implemented, so that the user can have reserve amplifiers. Using the complete alarm and digitalized information systems of the MOT 20000 FL B.III-IV-V, the user can control the following parameters: exciter forward and reflected power, video level, audio level, synchronism level, power supply voltage level, consumption and voltage of each RF amplifier (module). The transmitter includes protections against: forward power excess, SWR excess, over-consumptions, over-voltages and over-temperature. The MOT 20000 FL B.III-IV-V also includes digital telemetry output and Notch BPF (Band Pass Filter).
TECHNICAL SPECIFICATIONS

Class AB1
Available standards B, D, G, H, I, K, M, N
Frequency range Band III-IV-V
Cooling Air forced
Operating temperature From -10 to +45°C
Storage temperature From -30 to +85°C
Max relative humidity 90% non-condensed
Power Supply 220VAC ± 15%, 50/60Hz
Consumption 30kVA
Protections (each amplifier) Over-current of each module, direct and reflected over-power and over-temperature
Dimensions 3000x1770x900
Weight 1600kg

VIDEO PARAMETERS
Input connector and impedance Female BNC connector / 75Ω
Input level 1Vpp ± 6dB
White clipper 95%
2KT factor ≤1.5%
Amplitude / Frequency response ≤±0.5dB
Chroma / Luma interference ≤4%
Sync pulse compression ≤3%
Weighted S/N ratio ≥60dB

AUDIO PARAMETERS
Input connector and impedance Female XLR connector / 600Ω-10kΩ selectable
Input level 0dBm ± 8dB, 0.5dB steps
Frequency response ±0.5dB (typical: ±0.2dB)
Unweighted S/N ratio ≥65dB

OUTPUT PARAMETERS
Nominal Output power 20000Wps
Output Impedance 50Ω
Unequal Load 2:1 ROE Max.
I.M.D. (-8, -10, -16dB) Better than -54dB with nominal output power
Spurious (With output filter) Better than -56dBc with output filter
Output frequency stability 1ppm
Output connector EIA 1+5/8” or 3+1/8”
RF monitor connector BNC Female