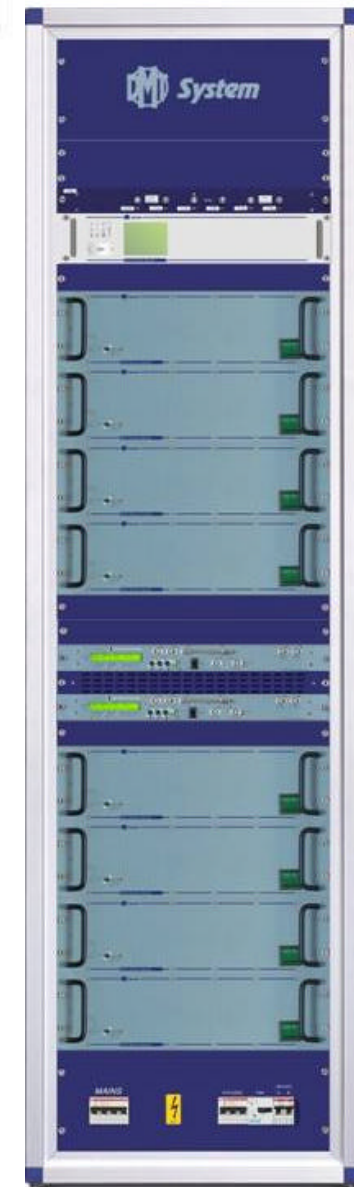


Analog Transmitter 10 kW p.s.

- **UHF** frequency bands (depending on the product version)
- **LDMOS technology.**
- **Broadband standardized design** to ensure the compatibility and prompt availability of spare parts.
- **Thermal design** for reliable operation.
- **Modular architecture** with full redundancy for fault-proof operation
- **Hot swap**” of the system modules, without service discontinuities
- **Isolation transformer** with electrostatic shield at the mains power input
- **Front panel and keyboard** to allow a complete equipment control.
- Several interface options for **remote control, including SNMP.**
- **Frequency references** built-in OCXO, input for optional external reference.
- **“Digital-Ready”** Delivers up to 3.2 kW rms in DVB-T, by adding only the digital driver
- **“Dual cast”** configuration available for automatically switched digital/analog operation

Liquid
Cooling



Reference

code:

TVTX-UHF-08M37-DD/G

dual driver, UHF band, PAL-G

Analog TX 10 kW p.s.

Technical Data

Product Identifier		08M37
RF frequency range		UHF-IV-V (470 ÷ 860 MHz)
Output RF p.s. power (typ)		10 kW
RF	Spurious emissions	better than -60 dB
	Harmonics	better than -60 dBc
	IMD	better than -57 dB typ., (-5, -10, -16 dB input)
Amplification class		A+AB
Vision/sound amplification		common
System configuration		dual driver (others on request)
RF out connector		3 1/8" EIA flange, 500
Mains	Voltage	400 VAC (±15%) @ 47÷ 63 Hz (3phase - 4wires)
	Power consumption (equipment) (*)(**)	33 kVA
	Power cons.(cooling)	2,8 kVA
	Power factor	>0,9
Size (***)	Width	612 mm
	Height	2300 mm (overall) (44U)
	Depth	1412 mm
Weight (***)		680 kg
Coolant flow rate (l/min)		96
Cooling system		liquid cooling
Mechanical noise level		better than 64 dBA

(*) black level

(**) Power consumption depends on output power, frequency of operation and system configuration, voltage value: contact DMT for specific data.

(***) transmitter cubicle only, water cooling system dimensions may vary depending on specific installation



Analog TX 10 kW p.s.

Modulation Characteristics



TV system		PAL
Standard		B/G, H, K, I, M, N (specify in the purchase order)
Audio system		MONO/ IRT (specify in the purchase order) (*)
Video input	Level	1V _{pp} (0.5÷2 V)(DC component level in the range -5÷5 V)
	Ret. loss	better than -30 dB (0÷6 MHz) (75 Ω)
	Connector	1•BNC female, 75 Ω
Audio input	Level	6 dBm ± 6 dB (Δf= 25 ÷ 50 kHz)
	Ret. loss	better than -30 dB (40 Hz÷15 kHz) (600 Ω, bal.)
	Connector	1•XLR female, 600 Ω (IRT config. : 2 inputs)
Vision	Tilt 50 Hz	2% max (typ 1% max)
	Tilt 15 kHz	2% max (typ 1% max) (luminance bar)
	K factor	2% max (with 2T sin ² pulse)
	2T/bar pulse ratio	±2% max
	Luminance non-linearity	5% typ.
	Differential gain	5% max
	Differential phase	±3° max
	ICPM	±3° max (TYP 2° @ sync level)
	S/N unweighted	>55 dB (unweighted continuous)
	S/N weighted	>60 dB (CCIR 567)
Sound	Freq. response	0.5 dB max (40 Hz ÷ 15 kHz) (amplitude)
	Preemphasis	50 or 75 μsec (depending on Television Standard)
	Harmonic Distortion	< 0.5% (40 Hz ÷ 15 kHz, Δf = 50 kHz)
	S/N unweighted	> 60 dB (unweighted continuous - FM)
	S/N weighted	> 63 dB (CCIR 567 - FM)

(*) NICAM system available on request

Analog TX

10 kW p.s.

Frequency References

Built-in frequency reference	Frequency	10 MHz OCXO
	Time stability	better than $\pm 10^{-7}$ /year
	Temp. stability	better than $\pm 2.5 \cdot 10^{-8}$ (-20 \div 70°C)
External frequency reference	Frequency	1-5-10 MHz
	Level	1 V _{pp} (0.7 \div 1.4 V)
VCO tuning step		1 Hz

Monitoring

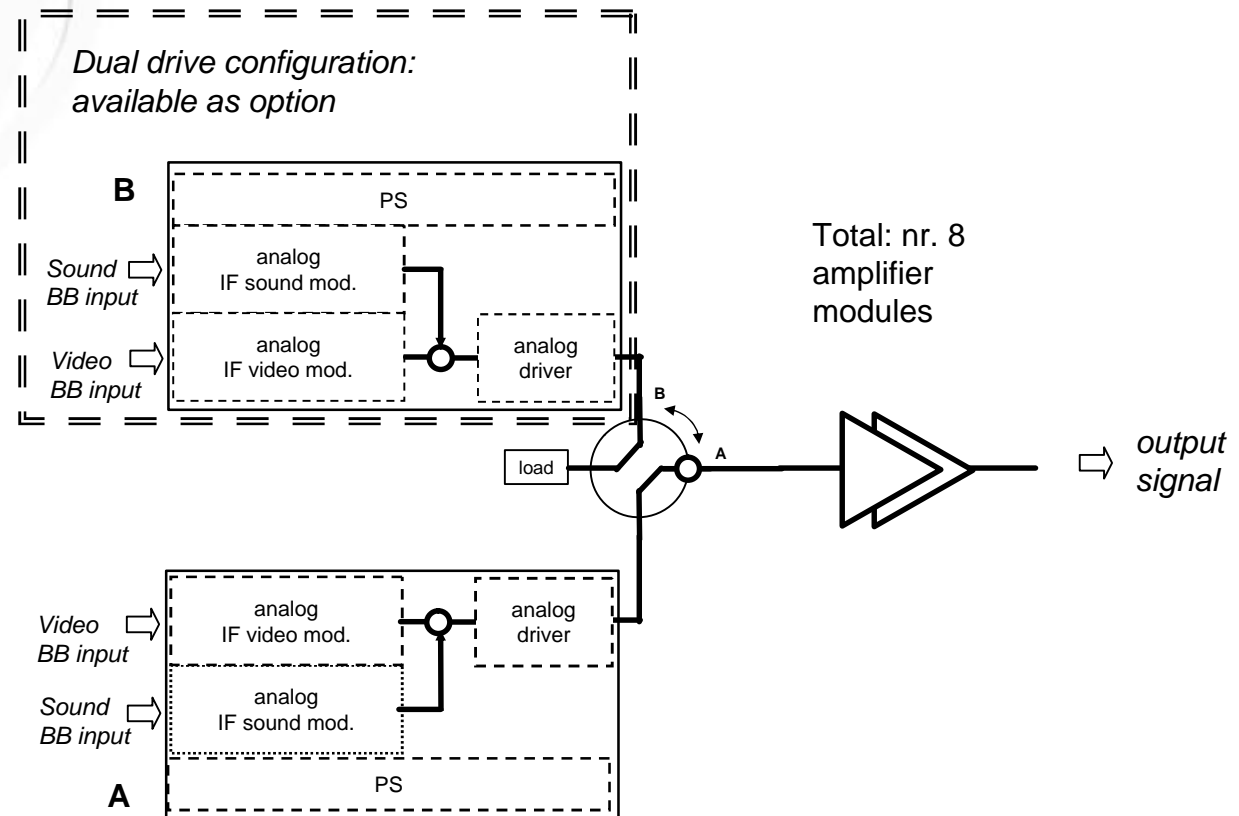
RF monitoring Connectors	RF fwd monitor	SMA female , 50 Ω
	RF refl monitor	SMA female, 50 Ω
Remote control interface		parallel: TLS/TLC (IEC 60864-1) option: serial:RS485 / SNMP

Operating Conditions

Operating temp. range	0 \div 50°C
Max rel. air humidity	95% @ 30°C, no condensation
Max altitude	2000 m a.s.l.
Safety	EN 60215 (IEC 215)

Analog TX 10 kW p.s.

System Outline



Analog TX 10 kW p.s.

Cooling circuit:
typical
installation
outline

