



20kW FM TRANSMITTER

Technical description

Version 1.1 – 04/2017



TX20KGX TECHNICAL SPECIFICATIONS

Frequency Range	from 87,5 to 108 MHz
RF output power	20 kW typ; 19 kW min.
Exciter power:	10 W
Output power ALC stability	± 3%
Harmonic and spurious emissions:	< 80dB
Output RF impedance	50 Ohm
RF output connector	flange 1-5/8"
RF sampling connector	BNC
Modulation input	-3.5 ÷ +12.5dBm
Modulation signal	Mpx, L & R, Mono, Aux
S/N stereo	>75dB
Power supply	400 V _{ac} +10% / -15% 3phases with neutral
Total consumption	<32kVA
Suggested operative temp. range:	0 to -35 °C, extreme: -5 to +50 °C(*)
Relative humidity	up to 95% not condensing
Dimensions (2 x 30 units 19" UL standard rack): ...	60 x 105 x 160 cm (W x D x H each box)
Weight each box(♦)	245Kg

DESCRIPTION:

The apparatus is composed by 2 standard TX10KGX system modules in a double rack not including the coupler (in a rack apart), the system controller and the EXC30GT exciter(s). On the top of the apparatus it is located an output flange for the exhaust hot air conveyed by the ventilation system and the RF output. This latter may be optionally mounted on the backside of the rack.

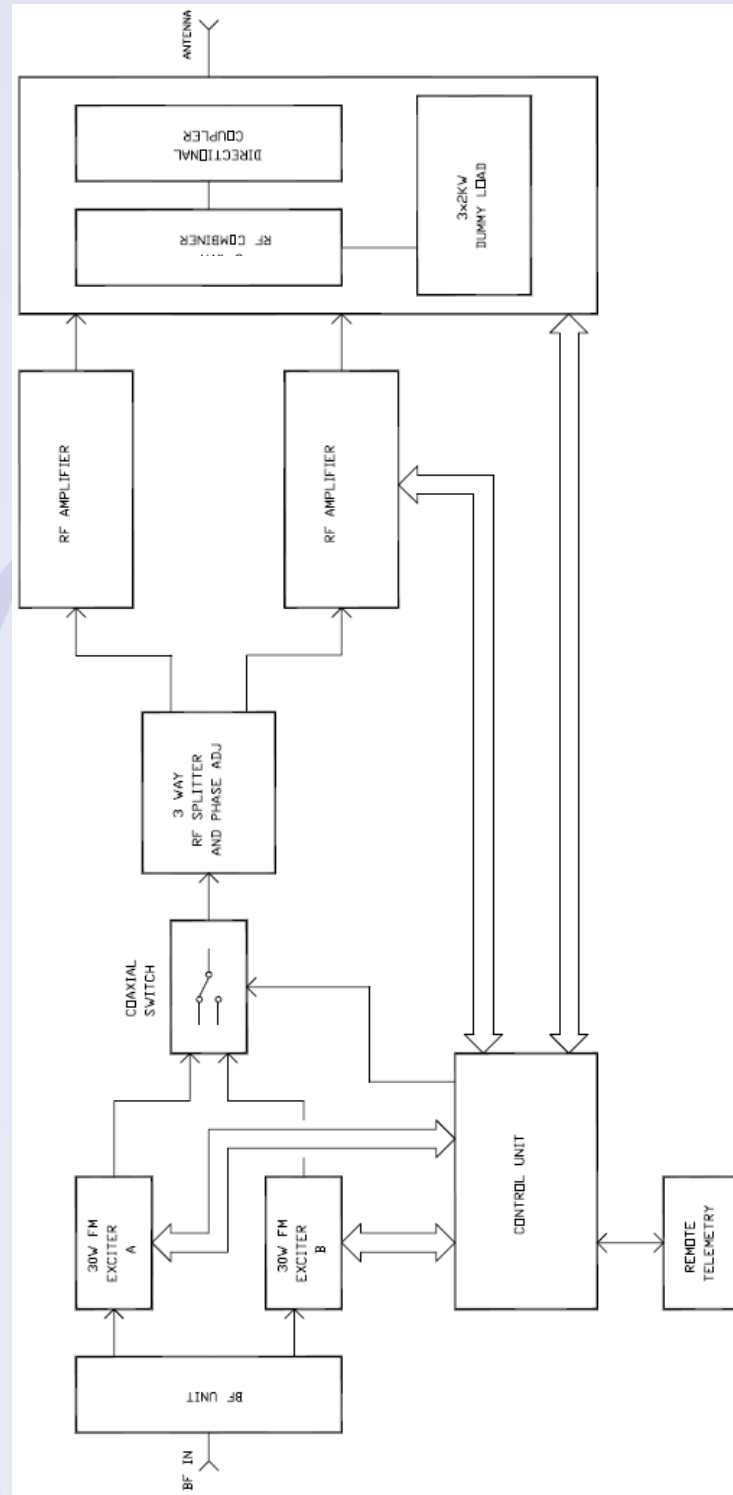
The good redundancy of the system assures the operative service also in case of partial or total failure of one or more amplifier modules. The total efficiency is very high.

The system is natively arranged for Dual Drive option and total remote control through Ethernet or optionally by GSM connection from a base station or partial control through SMS from standard cellular phones.

* with the reduction of the power

♦ Net weight included the ventilation system

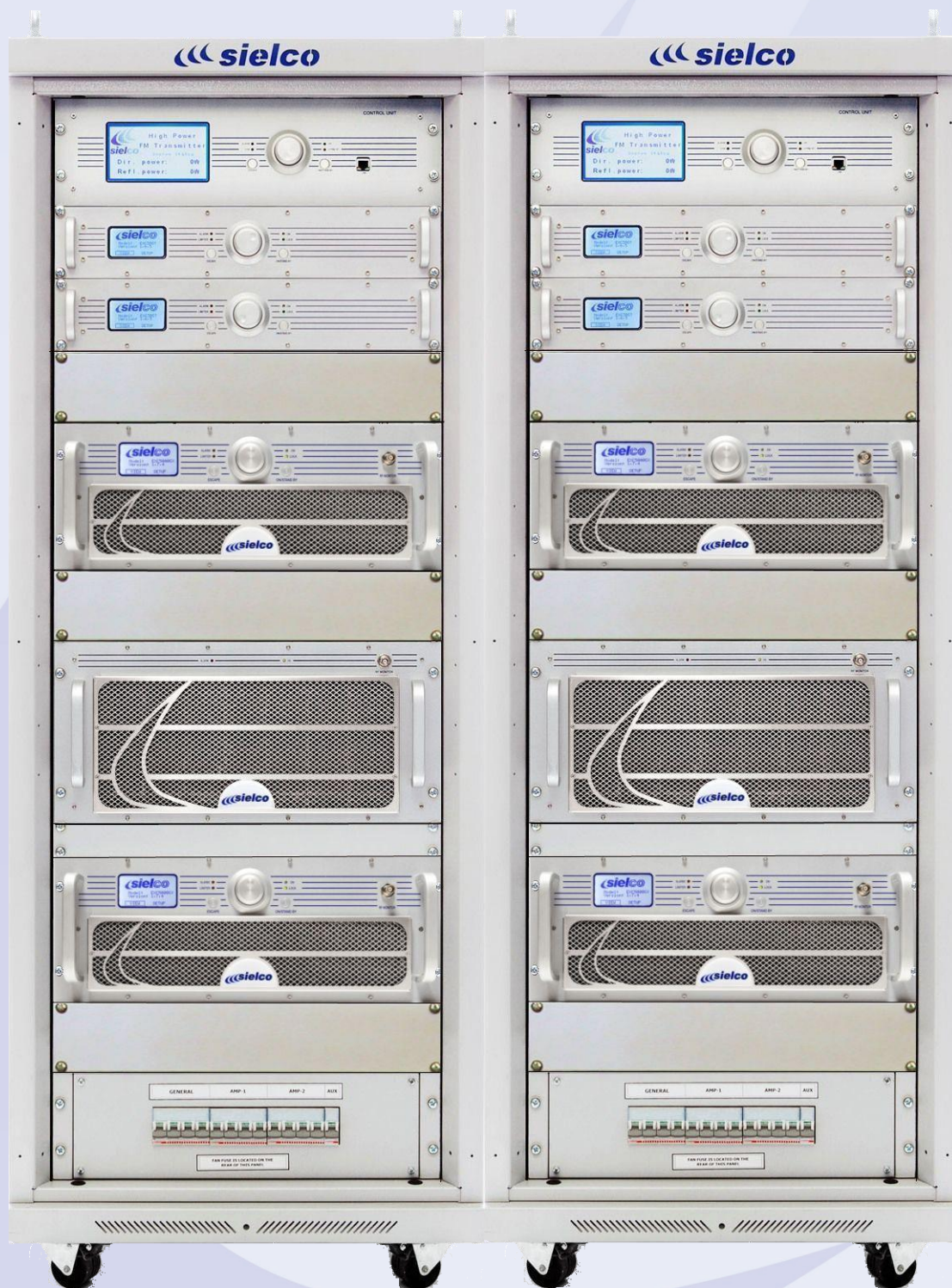
BLOCK DIAGRAM OF EACH 10kW TRANSMITTER



Note: this diagram is for example purpose only



TRANSMITTER COMPOSITION (ONE RACK FOR COUPLER TO BE ADDED)



Note: real position of modules may slightly vary depending on system options