

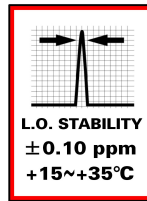
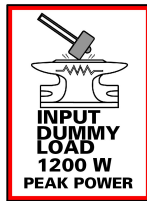
AEMME HIGH PERFORMANCE 50 MHz RADIOTRANSVERTER FK-855 H10 / H30



**HIGH
LINEARITY
PUSH
PULL
12 W RMS
RF POWER
AMPLIFIER**



**HIGH
LINEARITY
PUSH
PULL
30 W RMS
RF POWER
AMPLIFIER**



The FK-855 H10 and H30 SIX METERS are the new generation radiotransverters* for the 50 MHz band given to all high-class HF transceivers with a good dynamic range of receiving section and are

always reliable and ready to use in three simple steps.

The front-end built with a DUAL-GATE MOS-FET Vishay Telefunken*, has a maximum noise level of 0,8 dB @ 51 MHz, the double-balanced mixer used is the renowned SBL1-1 Mini-Circuits* with an IP3 of +16 dBm, and along with this, a high dynamic and low noise level IF amplifier made up of four JFET with an high IDSS to complete the receiving section. The RX gain is variable from 20 dB to 28 dB to obtain maximum performance regarding sensitivity and resistance to the intermodulation with any type of HF receiver (14 / 26 / 28 / 144 MHz).

The high stability of ±0,1-ppm of the local oscillator with low phase noise, is obtained by a control of temperature with a high precision sensor and an integrated heater capable of bringing the conversion crystal to the correct temperature in only three minutes.

The great stability of the local oscillator frequency along with the high speed of the solid-state antenna switch, through special RF PIN diodes, make it perfect for digital modes.

To really take advantage of these types of emissions it is possible to activate the radiotransverter in transmission through a direct link to the PTT IN, while the VOX RF that checks its input reacts automatically when the transmitter is activated.

If the mode of emission chosen is SSB, the relative switch on the front panel adapts the time constant to the natural pauses in speech.

The maximum continually sustainable RF power input of the FK-855 H10 and H30 is 60 W RMS, six times as much as that of the RF input advised at 10 W RMS. Moreover, the internal dummy load can support without damage, an RF power peak of 1.200 W to ensure protection to the RF final amplifier stage of the transceiver.

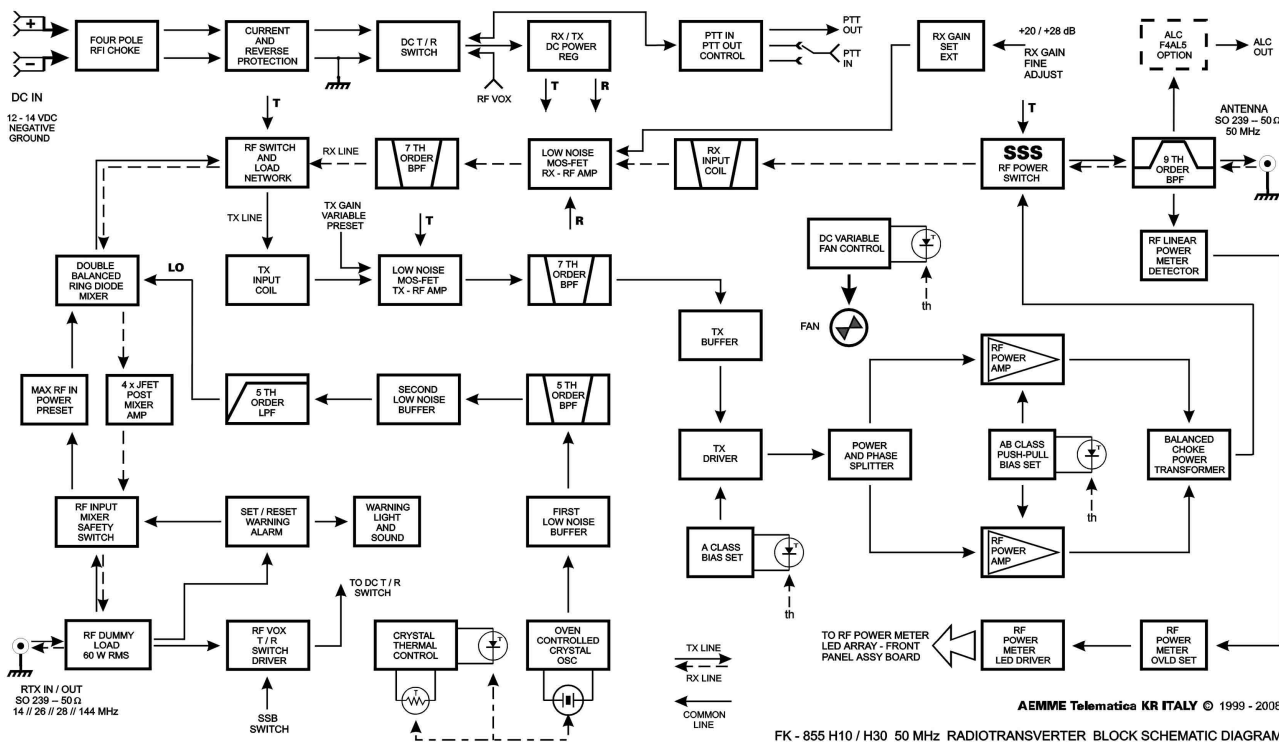
The RF power amplifier of the FK-855 H10 has an output of 12 W RMS while the model FK-855 H30 provides 30 W RMS at the antenna jack, both using a matched-pair of RF POWER TRANSISTOR Mitsubishi* in push-pull configuration with a double-magnetic circuit for a superior transmitting-linearity.

An electronic sensor controls the temperature of the transistor of the RF final amplifier stage determining the speed of rotation of a silent Papst* ball-bearing fan that is located in the rear panel therefore permitting absolute stability of performance even during contests and the most serious working conditions.

ORDER CODE	ORDER CODE	CONVERSION
855H10S14	855H30S14	14 / 50 MHz
855H10S26	855H30S26	26 / 50 MHz
855H10S28	855H30S28	28 / 50 MHz
855H10S144	855H30S144	144 / 50 MHz

RADIOTRANSVERTER* AEMME FK-855 H10 / H30 – 50MHz SPECIFICATIONS

Frequency Conversion:	14 / 50 MHz – 26 / 50 MHz – 28 / 50 MHz – 144 / 50 MHz
Emission Modes:	CW, SSB, FM, Packet F1 / F2, AFSK, AM
Input / Output Impedance:	50 Ω unbalanced – coax jack UHF SO239
Operating Temperature Range:	0°C - +50°C
Frequency Stability:	+15°C ~ +35°C better than ±0,1 ppm / 3 min. @ 25°C warm up
Input Voltage / Protection:	13,8 VDC ±10 % / polarity mismatch – high current – RFI filter
Power Consumption:	RX 0,35 A / TX 3,6 A @ 12 W RMS / TX 6,4 A @ 30 W RMS
Dimensions / Weight:	244 (W) x 49 (H) x 220 (D) mm / FK-855 H10 Kg 1,5 – FK-855 H30 Kg 1,7
TRANSMITTING SECTION	
Power Input:	internal preset 8~10 W RMS / 3~5 W RMS / 100 mW RMS on demand
Power to dummy load:	60 W RMS continuous / 1.200 W peak 5 ms max
Input Protection:	threshold level 18 W RMS ±1 W
Signaling Protection:	acoustic with level +80 dB @ 6,5 KHz / optical LED WARNING
TX / RX Switch:	VOX RF / PTT IN positive or grounded – internal preset / PTT OUT output
Attack Time VOX RF – TX ON:	≤0,6 ms
Release Time VOX RF – RX ON:	≤3 ms switch SSB OFF / 1,2 s switch SSB ON – internal preset
SWR Input:	1,1 : 1 typ. – 1,3 : 1 max
Frequency Range:	50 MHz ~ 52 MHz ±1 dB
Power Output:	FK-855 H10 – 12 W RMS @ 13,8 VDC / FK-855 H30 – 30 W RMS @ 13,8 VDC
Harmonic Radiation:	better than -60 dBc
RECEIVING SECTION	
RX Front-End Gain:	+28,5 dB max – MOS-FET Dual-Gate BF988 Vishay Telefunken*
Noise:	0,8 dB max @ 51 MHz
Overall Gain:	+20 dB ~ +28 dB continuous external setting
Double-balanced Mixer:	SBL 1-1 Mini-Circuits* IP3 +16 dBm
Intermediate Frequency Rejection:	85 dB or better
Image Frequency Rejection:	80 dB or better
Frequency Range:	50 MHz ~ 52 MHz ±1 dB



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OPTION **1H50** – ALC MODULE F4AL5
 OPTION **2H50** – N FEMALE ANTENNA JACK
 OPTION **3H50** – ANTENNA BY-PASS

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