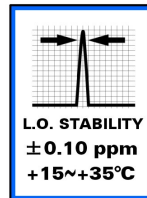
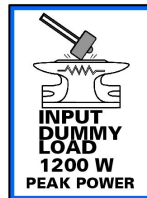


# AEMME HIGH PERFORMANCE 70 MHz RADIOTRANSVERTER FK-855 H10 / H30



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

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



The FK-855 H10 and H30 FOUR METERS are the new generation radiotransverters\* for the 70 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 @ 71 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 26 dB to obtain maximum performance regarding sensitivity and resistance to the intermodulation with any type of HF receiver (26 / 28 / 50 MHz).

A multi-polar notch filter, positioned at the input of the antenna is able to eliminate any interference coming from the nearest FM broadcasting band.

The high stability of  $\pm 0,1$ -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 TX / RX solid state switch and the superior frequency stability, make it an ideal instrument for the digital mode emissions. Special PIN diodes capable of working with a high RF power, substitute the classic antenna relay system, so avoiding the minimum delay that this electro-mechanical component inevitably introduces.

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 supplies 28 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-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.

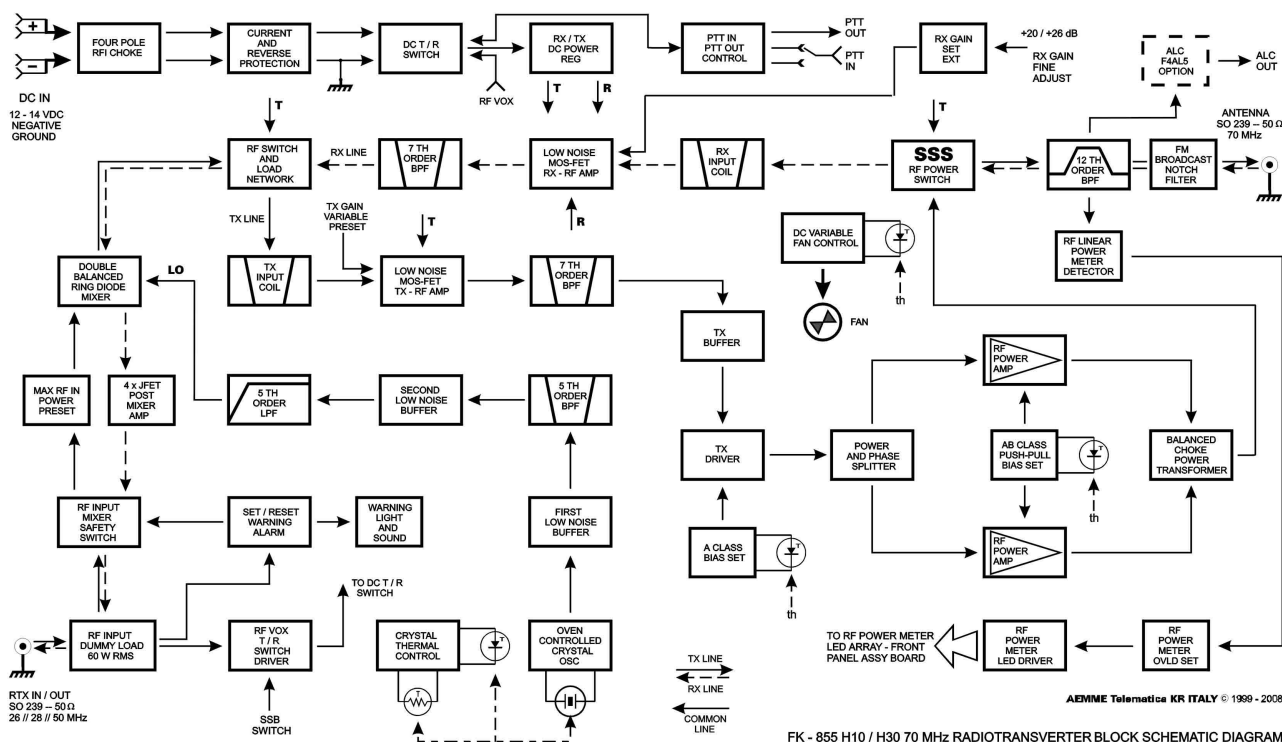
ORDER CODE	ORDER CODE	CONVERSION
<b>855H10F26</b>	<b>855H30F26</b>	26 / 70 MHz
<b>855H10F28</b>	<b>855H30F28</b>	28 / 70 MHz
<b>855H10F50</b>	<b>855H30F50</b>	50 / 70 MHz

# RADIOTRANSVERTER\* AEMME FK-855 H10 / H30 – 70 MHz SPECIFICATIONS

**Frequency Conversion:** 26 / 70 MHz – 28 / 70 MHz – 50 / 70 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 6,1 A @ 28 W RMS  
**Cabinet:** black anodized aluminum – front side finish, polycarbonate  
**Dimensions / Weight:** 244 (W) x 49 (H) x 220 (D) mm / FK-855 H10 Kg 1,5 – FK-855 H30 Kg 1,8

**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 ≤0,6 ms  
**Attack Time VOX RF – TX ON:** ≤3 ms switch SSB OFF / 1,2 s switch SSB ON – internal preset  
**Release Time VOX RF – RX ON:** 1,1 : 1 typ. – 1,3 : 1 max  
**SWR Input:** 70 MHz ~ 72 MHz ±1 dB  
**Frequency Range:** 70 MHz ~ 72 MHz ±1 dB  
**Power Output:** FK-855 H10 – 12 W RMS @ 13,8 VDC / FK-855 H30 – 28 W RMS @ 13,8 VDC  
**Harmonic Radiation:** better than -60 dBc

**RECEIVING SECTION**  
**RX Front-End Gain:** +28 dB max – MOS-FET Dual-Gate BF988 Vishay Telefunken\*  
**Noise:** 0,8 dB max @ 71 MHz  
**Overall Gain:** +20 dB ~ +26 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  
**FM Broadcast Frequency Rejection:** 95 dB or better  
**Frequency Range:** 70 MHz ~ 72 MHz ±1 dB



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OPTION **1H70** – ALC MODULE F4AL5  
 OPTION **2H70** – N FEMALE ANTENNA JACK  
 OPTION **3H70** – ANTENNA BY-PASS  
 OPTION **4H70** – 250 W RMS INPUT DUMMY LOAD

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