

VL-1000

HF/50MHz LINEAR AMPLIFIER

YAESU
...leading the way.SM

The New Standard of Excellence in Linear Amplifier Technology!

QUADRA SYSTEM

VL-1000
HF/50MHz 1kW Linear Amplifier

VP-1000
48V 48A Switching Power Supply



For a bold, clean signal from "Top Band" through the "Magic Band", the VL-1000/VP-1000 QUADRA SYSTEM belongs in your station!



QUADRA SYSTEM

HF/50 MHz Linear Amplifier* Automatic Antenna Tuner
1 kW Output
48V 48A Switching Power Supply

VL-1000 VP-1000

Innovative Quadra Push-Pull RF Design for 1 kW of MOSFET Power!

Yaesu's engineers have conquered the challenging task of providing high power output from 160 through 6 meters! YAESU's exclusive Quadra Push-Pull amplifier design utilizes 8 rugged MRF-150 MOS FETs for years of reliable operation. Special attention to system grounding and RF bypassing ensures very low spurious emissions, even at maximum power output.



Powerful 16-bit Control CPU Provides High-Speed Antenna Tuning with Extensive Memory and Multi-Band Memory Data Backup!

The heart of the control circuitry of the VL-1000 is a 16-bit microprocessor, driven by a Yaesu-exclusive tuning algorithm in software. The on-board return-loss bridge analyses the antenna system performance, instantly sending tuning instructions to the stepper motors in the antenna tuner section.

Large Dot-Matrix LCD Display Features World's First Panoramic SWR Monitor!

The huge 190 x 43 mm dot-matrix LCD provides a wealth of amplifier-status information, including peak power output, average power output, voltage, current, and SWR data. Another Yaesu "World First" feature is the Panoramic SWR Monitor, which displays "before tuning" and "after

tuning" SWR information for points across a band, providing you with instant data regarding antenna system performance.



Active Safety Protection Circuitry Assures Reliability and Quick Diagnosis of System Anomalies!

High-power devices like the Quadra System need world-class protection circuits to assure years of reliable operation. Active monitors inside the Quadra System warn of input voltage problems, excessive heat-sink temperature, excessive SWR, and/or power supply connection problems. Should a problem occur, a diagnostic message will appear on the LCD. Once the situation is corrected, the VL-1000's instant auto-reset process gets you back on the air quickly!

High-Performance Switching Relays with Automatic Maintenance Mode!

The VL-1000's high-performance switching relays have been specifically to provide years of fault-free operation. Unique to the VL-1000 design is the Automatic Maintenance Mode, which "exercises" the relays periodically while the amplifier is turned off to prevent the build-up of dust, dirt, or air pollutants on the relay contacts (the VP-1000 Power Supply must remain on in its "standby" mode). This self-cleaning protocol significantly reduces the chance that relay contact resistance could degrade performance.

Direct Air Flow Cooling System Provides Efficient Dissipation of Heat!

Twin high-speed fans, thermostatically controlled, quietly direct cooling air across the 76 vanes of the heat sink, efficiently transferring heat out of the amplifier compartment. Both the VL-1000 Amplifier and VP-1000 Power Supply have their own fan systems with independent thermostats.



Two Input and Four Output Antenna Jacks for Versatile Integration Opportunities in Your Station!

The two input jacks allow, for example, connection of an HF transceiver to INPUT 1 and a 6-meter transceiver to INPUT 2, while the four output jacks may be connected to your station's many antenna systems. Automated antenna selection is provided for the exciter connected to the INPUT 1 jack, eliminating the need for multiple antenna-selection keystrokes.

Automatic Band Change for Quick QSY!

When operating with most modern Yaesu transceivers, band data information can be transferred between transceiver and amplifier, allowing automatic amplifier band change when you change bands on the transceiver (Band Data Cable for FT-1000D/FT-1000MP/FT-920 supplied). The VL-1000 also provides Automatic Band Change via a frequency-sensing circuit which instantly changes band when RF drive is first applied, for use with other exciters.

VL-1000 Specifications

● General
Frequency Range: 160 - 6 Meters
160 - 15, 6 Meters (USA version)*
Power Output: (220V AC Input) 1000 Watts (SSB/CW)
500 Watts (FSK-RTTY/FM)
250 Watts (AM Carrier)
(120V AC Input): 500 Watts (SSB/CW/FSK-RTTY/FM)
125 Watts (AM Carrier)
Input Voltages: DC +48V, DC +12V, DC -12V
Current Consumption: 48A (DC +48V), 2.8A (DC +12V), 0.1A (DC -12V)
Dimensions: 413 (W) x 151 (H) x 451 (D) (include. feet, switches)
Weight: 21 kg (46.3 lbs.)

Linear Amplifier Section

Input Power: 2,100 Watts max.
RF Drive Power: 80 Watts (max.) for full output
Spurious Emissions: Better than -50 dB (HF)
Better than -60 dB (50 MHz band)
3rd-order Intermodulation Products: At least -30 dB
Input Impedance: 50 Ohms, unbalanced
Output Impedance: 50 Ohms, unbalanced
● Automatic Antenna Tuner
Matching Range: 16.7 Ω - 100 Ω (1.8 MHz band)
25 Ω - 100 Ω (50 MHz band)
16.7 Ω - 150 Ω (all other bands)
Maximum Power: 1,200 Watts
Insertion Loss: 0.5 dB
Matched SWR: Less than 1.5:1

VP-1000 Power Supply

Input Voltage: AC 100 - 240V (Automatic switching)
Output Voltage: DC +48V, DC +12V, DC -12V
AC Current Drain: 13A (AC 200 - 240V @ 1 kW output)
15A (AC 100 - 200V @ 500W output)
Dimensions: 413 (W) x 151 (H) x 381 (D) mm (include. feet, switches)
Weight: 14.6kg (32.2 lbs.)

Options

CT-56 Band Data Cable for FT-840/890/900
MR-1000 Mounting Rack w/Carrying Handles

For the latest Yaesu news, hottest products, visit us on the Internet! <http://www.yaesu.com> <http://www.yaesu.co.uk>

Specifications are subject to change without notice or obligation due to improvements in technology.

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Choice of the World's top DX'ersSM

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Large Dot-Matrix LCD Display Features World's First Panoramic SWR Monitor

The huge 7.6" x 1.7" (190 x 43 mm) dot-matrix LCD provides a wealth of amplifier- status information, including peak power output, average power output, voltage, current, and SWR data. Another Yaesu "World First" feature is the Panoramic SWR Monitor, which displays "before tuning" and "after tuning" SWR information for points across a band, providing you with instant data regarding antenna system performance.



About this brochure: we have made this brochure as comprehensive and factual as possible. We reserve the right, however, to make changes at any time in equipment, optional accessories, specifications, model numbers, and availability. Some accessories shown herein may not be available in some countries. Some information may have been updated since the time of printing; please check with your Authorized Yaesu Dealer for complete details.

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413W x 151H x 451 D mm
(including feet and switches)
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AC Current Drain: 13 A (AC 200 - 240 V @ 1 kW output)
15A (AC 100 - 200 V @ 500 W output)

Dimensions: 16.5" x 6.0" x 15.2"
413W x 151H x 381 D mm
(including feet and switches)
Weight: 32.2 lbs (14.6 kg)

Specifications are subject to change without notice, and are guaranteed within the amateur bands only.

Options

CT-58 Band Data Cable (For FT-897, FT-857 Series)
CT-118 Band Data Cable (For FT-450)

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