COBALT



A-1000 Fully Featured FM Amplifier

Datasheet and Specifications

Our Innovation

The COBALT Series of Fully-featured FM Amplifiers are our flagship Amplifier range. Comprising the best available technologies developed by our in-house Aqua Broadcast R&D team. Our innovative solutions are designed to be compact, efficient and use the very latest techniques and components.





Secure control and monitoring interface

COBALT Amplifiers support HTTPS, enhancing security through encrypted communication between a user's browser and the accessed website, making it difficult for third parties to intercept and read the data being transferred, providing greater privacy and security to confidential information in the configuration and monitoring of your Amplifier.

Already compatible with SNMPv1 and SNMPv2c, and SNMPv3 all COBALT products deliver improvements in performance, flexibility, and security.







COBALT A-1000

The COBALT A-1000 is a fully featured 1000W / 1kW FM Amplifier that has superior audio quality and sound clarity. Ideal for many Medium power Broadcast applications where High-quality audio is needed. The COBALT A-1000 Amplifier has an industry standard 7/16 DIN output, ready to connect to your Transmission line.

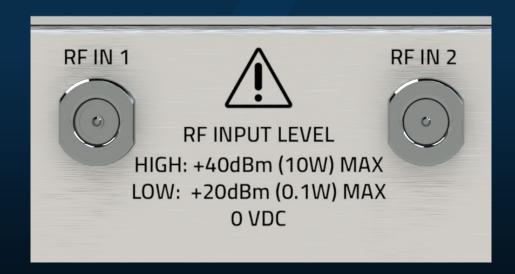
What sets our Amplifiers apart are their revolutionary Dual Input design with independent input RF power metering. If you have a 1+1 system or N+1 system using Cobalt exciters (C-10, C-30, C-50 or C-100) you can eliminate the need for any external changeover rack unit, as the dual drive system will take over if there is any issue. Saves Rackspace and \$\$\$\$. The A-1000 can accept two different Input drive levels. As standard, the A-1000 is set to HIGH mode (200mW to 10W, nominal 1W) on the RF Inputs. If you require the LOW mode (2mW to 100mW, nominal 10mW), you need to specify this when ordering.

User-friendly, the modern design includes an ultra-clear RGB display that's easy to read. The intuitive joystick controls with haptic feedback and supplementary silicon buttons streamline the setup process, getting you on the air swiftly.

The COBALT A-1000 offers advanced communication and automation capabilities, featuring an intuitive web interface and remote control via Ethernet (https). This means you can make adjustments or monitor the COBALT Amplifier from anywhere. Additionally, it offers full SNMP Version 3 management, enabling you to send emails, receive alerts, and monitor audio remotely, providing you with the assurance of full control from any location worldwide, using any device with a web browser.

Maintaining the COBALT A-1000 is cost-effective and hassle-free, thanks to easy access to all components and software-controlled variable fan speed.

It stands out with its superior AC efficiency, compact design, and reduced weight, resulting in low transportation costs and the lowest total cost of ownership in its class.









RGB Screen



















Dual Power



All COBALT FM Amplifiers run on a rock-solid LINUX Operating System that we have fully customized to exceed the demands of 24/365 Broadcasting.

A clear RGB Display lets you either set up any COBALT Amplifier, and see parameters at a glance. With an intuitive menu system and Joystick providing Haptic feedback, it's easy to control any COBALT Amplifier.

Dual RF Inputs, let you use dual exciters in a Hot and Standby configuration, with all switching taking place in the C-3000 amplifier.

The included WEB interface with HTTP/S also provides Alarm and email communication of alerts and Alarms. Control and monitor COBALT from any web-enabled device from anywhere.

SNMP v1, v2c, v3 ready to provide users with easy and flexible realtime monitoring and remote-control options

Use the included scheduler to automate events and configuration changes based on Day/ Time schedule

Automate events and configurations by SNMP and GPIO for alarms, faults, and system changes.

Set up multiple configurations, to automate settings, and configurations. Seamlessly change the C-3000 from the Automations, Scheduler or Alarms and events.

Change RF inputs in the event of silence or exciter failure, with notifications and logging.

OPTIONAL EXTRAS

48V DC Power input (power to system control, no RF power is available) Lets you still get Alarms, Telemetry and email communications.

Optional Low-mode for RF Inputs 2mW to 100mW, nominal 10mW

Available for the A-1000. This option adds a 2nd power supply with its own AC input, running parallel with the same line or to a second AC line or UPS for reliable power backup. 2nd PSU required for 110V operation.

Externally mounted Fans are available for the A-1000.



GENERAL

Output Power (W)
Range (W)
RF Output connector
Input ACV @ 50/60Hz
Power Connector
Power supplies
Dimensions WxDxH (inch)
Dimensions WxDxH (cm)
Weight

1000 200-1000 7/16 DIN (Female) 100-240 (for 110V the optional 2nd PSU must be fitted) IEC 13A filtered 1 (second PSU is optional for redundancy) 19 x 18 x 2RU (3.5") 48.3 x 45.7 x 8.8 7.2kg / 15.87lb

PREAMP

Power Stability ≤ ± 0.25dBAsynchronous/AM noise ≤ -60dBSynchronous AM s/n ratio ≤ -60dBRF Harmonic and Spurious suppression AM s/n ratio Meets ETSI requirements
VSWR operation Fully protected against gradual
Or sudden VSWR condition

RF INPUTS

RF1

High mode is default, low mode is factory fitted option.

N type

23dBm to 40dBm, nominal 30dBm (200mW to 10W, nominal 1W

Low mode input range is 3dBm to 20dBm, nominal 10dBm (2mW to 100mW, nominal 10mW)

Automatic input gain adjustment

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Automatic input gain adjustment

POWER SUPPLIES

Type Hot swappable

Number of Power Supplies 1 Standard

1 additional Power Supplied fitted

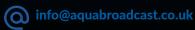
as an option at the Factory

ENVIRONMENTAL

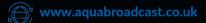
Altitude Temperature range

Humidity

15,000 ft / 4,420m AMSL 0 to +45°C working -10 to +50°C storage 95% @ 35°C, non-condensing







Aqua Broadcast was formed by a diverse and experienced team of people with extensive Broadcast and electronics experience. We love Broadcast just as much as you do, and we saw the need to do things differently to all our competitors.

With an international presence and offering multi-lingual staff, Aqua Broadcast has positioned itself as a dynamic and innovative company, driven by its passion for Broadcast and Studio products.

At our core are our customers. We focus on designing and building products for engineers and station owners who demand reliability, ease of use, with cutting-edge design and features. Listening to customer's ideas, feedback and success stories allows us to build products that are feature rich, reliable as well as easy to use.

Our strategically located offices worldwide mean you are never out of touch due to time zones. Sales and support are available round the clock. Whether it's a phone call, or email we are always with you every step of the way.

For details of your local dealer or Distributor, please refer to our website or contact us.

The purchaser will be responsible for all import taxes, customs, duties, freight costs and insurance.

Warranty Information

At Aqua Broadcast Ltd, we are devoted to building the highest quality products and the never-ending pursuit of providing a better experience to our customers.

Our warranty statements are a continued commitment to providing reliable solutions with our technologies.

All Aqua Broadcast Ltd benefit from a 2 year Manufacturer's Warranty. Further information on the Warranty can be seen in each products user manual, or by contacting us.

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