



Central Management Processor

Features

- System on a chip technology
- Up to 32 microphone access panel inputs
- Supervises up to 512 amplifier modules
- Fully supervised critical path
- Interfaces to other life critical systems
- Remote monitoring feature
- Compatible with standard P3 system

Description

The BARTEC VODEC VX/AT-M is designed to provide access priority and zoned area switching of electronically generated alarms and live voice program inputs as a central component of a high integrity Public Address and General Alarm (PAGA) broadcast system.

The VX/AT-M unit comprises of a low profile space saving 1 unit high 19 inch enclosure 160 mm (6.5 inch) minimal depth enclosure. Central management processor accepts connection from multiple access panel control positions, expandable to client specification.

The unit generates a selection of secure alarm cadences and provides interface to other telecommunication systems like telephone system or Fire and Gas Detection system. A single BARTEC VODEC VX/AT-M processor can automatically supervise

- Up to 512 power amplifier modules VA300+M
- Up to 32 microphone access panels
- Battery charger
- Flashing beacons

The unit incorporates comprehensive signal processing to ensure highest speech intelligibility. The LED diagnostic display and test tone/supervisory reset control, enables the engineer to issue test tick tone on a zone by zone basis. Supervisory routines automatically check critical path performance from operator microphone through to loudspeaker network and end of line devices.

The complete unit is connected to the host amplification equipment by "quick release" plugs and sockets. This allows rapid service replacement on a plug and play basis. VX/AT-M processor generates both IMO and PFEER/NORSOK alarm tone menus with alternative alarm tone cadences/frequencies readily programmed on request. Alarm tones are fully

monitored and the package is equipped as standard for high criticality duplicated A/B system operation.

The alarm tone package is fully synchronised when used in A/B applications. Service is maintained in the event of failure of an alarm tone generator in either A/B system. Priority access ensures that routine broadcasts are automatically over-ridden by critical input requests.

BARTEC VODEC system on a chip

The VX/AT-M processor is based upon highly secure VSOC technology which obviates sequentially executed stored program. Instead the VSOC chip is configured by tamper-proof switches located inside the unit.

This eliminates dependency on PCs and flash memory that are not sufficiently secure enough for a life safety system. The user is able to make limited configuration changes to the PAGA system with training. No annual software licence is required to run the VX/AT-M processor.

Remote monitoring

The VXAT-M is enhanced to capture and report detailed operational information in real-time and when connected to M-Class infrastructure all this information is available to a remote server, which logs and displays data as required.

The remote monitoring features are robustly implemented and designed in such a way so to not affect PAGA critical functions in any way. Additionally the VX/AT-M is enhanced to store and report its unique serial number and other asset management data to further improve uptime and predictive maintenance.

The VXAT-M also supports the enhanced remote configurability function for end-users desiring such capability. This provides qualified personnel or BARTEC VODEC engineers the ability to modify programmed configurations remotely or locally without the need to power-down or replace hardware or even to physically access the cabinet. Alarm cadence and zoning for example are fully configurable using this method. Full accredited security mechanisms are implemented to prevent any access by unauthorized or accidental means, and this function is an option which may be completely omitted depending on security vs functional requirements.

The VX/AT-M is fully backwards compatible with the standard VX/AT and may also be used to bring a level of remote monitoring to existing non M-Class installations.

➔ Technical data

Power supply

DC 48 V

Consumption

25 W

Heat emission

10 W

Voice inputs

2 x VAP30 as standard

2 x VAP01 as standard

2 x auxiliary audio

1 x telephone interface

Alarm tones

4 x IMO

4 x PFEER/NORSOK

Broadcast zones

4 zones

Test tick tone

1 kHz tick issued at second intervals

Compression on voice inputs

up to 40 dB

Frequency response

150 Hz to 7 kHz

tailored to optimise speech intelligibility

Line monitoring level

-6 dB

Audio input/output level

0 dB

Audio VAP input level

-3 dB

Dimensions (width x height x depth)

483 mm x 44.5 mm x 160 mm

(19" rack mount, 1 unit)

Weight

1.4 kg

Temperature range

-0 °C to +50 °C