swiss made g+m elektronik ag

APS-FLEX

The pre-configured flexible APS voice alarm system (VAS / VACIE)

APS-FLEX-16/32

THE FLEXIBLE VOICE ALARM SYSTEM

The APS-FLEX system is a pre-configured unit and is suitable for mid-sized voice alarm systems. All important functions and components are already integrated and are configured so they are ready to operate.

The APS-FLEX system is suitable for all premises and installations in which a PA system is used for emergency announcements and is thus a central part of the security concept. All aspects of Standard EN 54-16 are complied with. The system is monitored comprehensively – from the microphone to the speaker and from the power supply to the amplifier.

In the event of corresponding failures, this is signalled and logged and the system is switched over automatically to the integrated emergency power supply or to the reserve amplifier. Announcement options into up to 16/32 zones with background sound round off the diverse capabilities of the system.

APS-FLEX consists of components of the APS®-APROSYS system family and can be extended at any time with the diverse functions of the system family. This thus allows building management systems and subsystems to be networked via LAN and both capacities and zones to be extended individually.

APS-FLEX-16 (8A/B)

- 2 × 250 W/3 × 250 W, digital amplifiers

- 1 Backup amplifier 250 W

- Emergency power supply

- Monitored interface to the fire alarm system (FAS)

- Music input

- Interface for 16 digital microphone consoles

- Freely programmable digital microphone console, with monitored voice call point for 16/32 lines and 3 covered alarm buttons

- Freely programmable, monitored alarm memory for 30 alarms

- Error memory from which items can be retrieved with date stamp

THE PRE-CONFIGURED ALL-ROUNDER

EN 54-16 CERTIFIED

☑ **Monitored in accordance with EN 54-16**

Dig. microphone console
APS-316.2-3AL
APS-332.2-3AL
for single/multicasting

0 dB

FAS interface
8 contacts

☑ **Monitored in accordance with EN 54-16**

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Variant: APS-FLEX-8AB, APS-FLEX-16AB
Voice alarm solution for **8 A/B** or **16 A/B lines**

1 A
1 B

APS-FLEX-16/32
Voice alarm solution for **16/32 speaker lines**

16 ×
32 ×

Backup amplifier

Emergency power supply

☑ **Monitored in accordance with EN 54-16**

Monitored microphone console

The microphone which is used to provide life-saving instructions in emergency situations is monitored permanently. A defective microphone capsule is detected immediately by the system and is indicated as a fault.

Eight monitored inputs for tripping evacuation/alarm

An evacuation or an alarm text to all zones is tripped via these eight floating inputs, for example by a fire alarm system or by external contacts. The eight inputs are monitored so that a line short-circuit or discontinuity immediately leads to a fault signal.

Integrated emergency power supply

The integrated, maintenance-free 48 V high-capacity rechargeable batteries guarantee uninterrupted and fully autonomous operation of the emergency warning system for 30 minutes under full load. The integrated and intelligent charger is also monitored and evaluates the correct function of the re-

chargeable battery on the basis of the charge current.

Error logging

The system saves all relevant error messages with date and time of occurrence to a non-volatile EEPROM. So even if a power failure should occur, the system fully logs precisely what occurred and when.

Incorporated backup amplifier

Correct functioning of the 3 × 250 Watt amplifiers is monitored constantly by measuring the output levels. If an amplifier fails, the system switches over automatically to the fully independent third backup amplifier, thus ensuring unrestricted operation.

Speaker line monitoring

All 16 speaker lines are monitored permanently and without interruption. This means that this measurement is conducted simultaneously and without interrupting the background sound. This monitoring function is based on measuring the connected impedance.

This measuring method affords the advantage that a defective speaker is also detected in addition to a defective line. One additional advantage: This does not require a blocking capacitor which is subject to ageing for each individual speaker, thus drastically cutting servicing costs.

Incorporated MP3 module for audio signals in virtually CD quality

The integrated MP3 module is able to store up to 30 user-defined MP3 files with a total length of 30 minutes in virtually CD quality. The audio files are triggered either from the digital microphone voice call point or by one of the eight floating contacts. Audio signals such as advance alarm bell, siren or evacuation and alarm texts can be created extremely easily on the PC and loaded onto the central control and indicating panel.

Standard EN 54-16

Why voice alarm?
If a PA system is used to emit alarm or evacuation signals, we refer to it as an electro-acoustic alarm system.

What is the aim of a Voice Alarm System?
Being able to broadcast a clear and intelligible message for emergency measures in order to achieve the following objectives
• People in danger take the alert seriously
• People in danger know exactly what to do
• Avoiding panic and wrong actions and improving the reaction time drastically
• Pre-recorded messages make sure, that always a clear instruction of what to do is broadcasted
• Messages and life-saving instructions can be broadcasted through the Fireman's microphone
• The goal: Saving human life!

Typical applications
Whilst voice alarm systems therefore work well in all buildings, they are particularly beneficial for the following applications:
• Shopping
• Public Transport
• Sports Centres
• Company Buildings
• Schools & Universities
• Specialities like Tunnels, …
• Catering
• Public Buildings
• Hospitals & Retirement homes

What is the aim of the Standard Norm EN 54-16
The voice alarm system forms a important part of an evacuation procedure. The standard EN 54-16 sets out requirements for performance and system integrity to ensure 100% reliability and availability of the voice alarm system.

Specificatitions

	APS-FLEX-16 (8A/B)	APS-FLEX-32 (16A/B)
Power	230 VAC +/-10 %, 50 / 60 Hz	230 VAC +/-10 %, 50 / 60 Hz
Nominal Power	990 VA	990 VA
Nominal Power	4.5 A	4.5 A
Idle power	96 VA	96 VA
Standby time witout net	30 h	30 h
Full load operation time with net	30 min	30 min
Battery capacity	48 V / 24 Ah	48 V / 48 Ah
Output	16 × 100 V / 250 W max. per line	32 × 100 V / 250 W max. per line
Total output	2 × 250 W + 250 W (Backup)	3 × 250 W + 250 W (Backup)
Input FAS	8 × ext. Inputs (monitored)	8 × ext. Inputs (monitored)
Input microphone console	600 Ohm sym., 0 dBm / Digital	600 Ohm sym., 0 dBm / Digital
Input music CINCH	47 kOhm asym., -10 dBm	47 kOhm asym., -10 dBm
Dimensions (W × H × D)	425 × 572 × 340 mm (13 HE)	425 × 720 × 340 mm (17 HE)
Weight	67.5 kg	72.5 kg
Ordering information	APS-FLEX-8AB-H	APS-FLEX-16AB-H