TECHNICAL SPECIFICATIONS

Approvals	Certifications: EN 54-16, EN 54-4			
	User standards: VDE-833-4, NEN 2575, EN 50849			
	Conformity: Europe CPR/ CE, UAE Coc, UAE Coc			
Sampling frequency	48 kHz/ 24 Bit			
Signal delay	Input	Output	Signal delay	
	Analog 0 dBu	Analog 0 dBu	< 0.5 ms	
	Analog 0 dBu	BF-Bus	< 0.5 ms	
	MC LINK	Analog 0 dBu	< 0.5 ms	
	MC LINK	BF-Bus	< 0.5 ms	
	M-Bus	Analog 0 dBu	< 0.5 ms	
	M-Bus	BF-Bus	< 0.5 ms	
Distortion factor	Input	Output	Distortion factor	Frequency response
	Analog 0 dBu	Analog 0 dBu	< 0.1 %	20–20'000 Hz
	Analog 0 dBu	BF-Bus	< 0.1 %	20–20'000 Hz
	MC LINK	Analog 0 dBu	< 0.1 %	20–20'000 Hz
	MC LINK	BF-Bus	< 0.1 %	20–20'000 Hz
	M-Bus	Analog 0 dBu	< 0.1 %	20–20'000 Hz
	M-Bus	BF-Bus	< 0.1 %	20–20'000 Hz
Dynamic range	Input	Output		
	M-Bus to BF-Bus	113 dB typ.		
	M-Bus to analog output 0 dBu	113 dB typ.		
	Analog, Amplification 0 dB	117 dB typ.		
	Analog, Amplification 60 dB	96 dB typ.		
	MC LINK	118 dB typ.		
Power consumption	Power supply	Current Consumption	Power consumption	
	17 VI	20 mA	0.34 W	
	17 VA	340 mA	5.78 W	
	15 V	800 mA	12 W	
Signal-to-noise ratio	129 dBu typ., analogue input, equivalent input noise, input gain = 60 dB			
	96 dBu, BF out Residual output noise, BF out off 90 dBu, Line out Residual output noise, Line out off			
Power supply	In APS systems via APS bus. Optional power supply for stand alone applications			
Ambient temperature	-5°C to 40°C			
Humidity	15–90 %, non condensing			
Weight	3.1 kg			
Dimensions (W × H × D)	422 × 44 (1U) × 330 mm			

APS-9000

The controller with a future

APS-9000

THE NEXT GENERATION

EN 54-16 CERTIFIED

The APS-9000 central platform from g+m elektronik ag represents a new dimension in APS technology. The APS-9000 is based on a forward-looking design and architecture.

Featuring a Linux Embedded PC, it is much more than an innovative control unit: Like a mastermind, it networks your proven APS®-APROSYS system modules with new digital applications. This makes your voice alarm and audible system even more powerful and efficient.

APS®-APROSYS is the intelligent system solution from g+m elektronik ag: with its Swiss precision, user-friendliness and forward-looking concept, our APS® technology meets your most demanding requirements for voice alarm control and indicating equipment (VACIE), sound systems for emergency purposes (SSEP) and general public address solutions.

Improved audio quality
The APS-9000 provides even better audio quality and greater ease of use.

Tried-and-tested system modules plus new applications
Thanks to perfect backward compatibility, you can set up your existing APS® system solution with the APS-9000 and expand it further with new applications in the long term.

Compact design with the latest technology
The 19 most commonly used APS modules are digitally imaged in a compact design with only 1U. The APS-9000 is individually programmable and also scalable for complex plant configurations.

Ready for the digital expansion
For processing digital audio and video signals, all DSP functions are already integrated in the inputs and outputs and can be operated via remote control.

Managed ethernet switch for perfect data management
With the Ethernet Switch, the APS-9000 becomes your control centre. The four integrated managed ethernet ports are used to connect the graphical user interfaces, configuration software, remote maintenance, control and indicating equipment, control centres and building automation systems.

The ASP-9000's capabilities
• Integrated APS Engine
• Monitored according to standard EN 54-16
• 4 Channel Audio Player
• 8 programmable buttons / LEDs
• DSP for all analog and digital inputs / outputs
• 2 MC LINK inputs for serial microphone consoles
• 4 analog inputs -60 to 0 dBu
• 2 analog outputs 0 dBu
• 8 digtial monitored inputs
• 4 digital potential-free change-over contacts
• APS network functions
  (optional software package APS-9000-SW-NP1)
• Web server for operating and display units
  (optional software package)
• Embedded hardware firewall to separate
  VA and PA functions
• Various interfaces (optional software package)
  for connection to control centres and building
  management systems
• Digital AES67 audio matrix
  (optional software package APS-9000-SW-NP1)

COMPACT, COMPATIBLE, EXPANDABLE

swiss made — g+m elektronik ag

Building management system
Integration in building and security management system
• UMS (Securiton), Winguard
• Touch software
• Customer-specific via IP connection

WAN

Central access
All APS-9000 Control units are accessible in the network from one point and can be configured. This increases the practice of comfort and efficiency.

LAN

Networked Systems, sub-centrals

Installations in large buildings can be easily divided into several sub-centrals via IP networking
• Saving 100 V cabling
• Short distances to microphone consoles
• Local connection possibilities of other systems

Fintess studio

Multifunctional use possible

As a voice alarm or evacuation system with a variety of additional functions
• High-performance sound reinforcement with music horns
• Customer service via digital control and display devices
• Connectivity for media control system
• Prepared for operation via Webservice
• Local audio inputs such as microphone, cinch or Bluetooth inputs
  can be connected via the network

Restaurant

APS-9000 Stand alone

APS-9000 Stand alone
• Stand alone use possible thanks to versatile
  connection options
• Hub for microphone speeches
• Connection of digital audio such as active
  loudspeakers / columns

Conference room

Voice alarm system
EN 54-16 / 4 / 17 certified

Monitored fire alarm system with interfaces to other systems such as:
• Building management systems   • Smoke extraction systems
• Emergency light control   • Parking guidance systems
• Escape route signalization

Hotel (new building)

Perfect sound, crystal clear speech intelligibility

Optimal sound adjustment for every event with retrievable presets
• Digital sound processors

Security level 3A   **Security level 3B**

Public address via two control centres through synchronous AoIP

Cable-legend
– Analog audio connection   – RC16 Control bus
– 100 V Connection   – MC LINK Microphone consoles
– IP Connection   – Other wiring
– IP Ring safety net   – Fiber optics
– Analog Remote control unit

Integration Voice alarm system in existing systems

Integration of existing systems
Master clocks, update control centre, compatibility amplifiers and modules, renewal of existing control centres

Shopping Center (existing building)

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