



## **g+m Loudspeaker monitoring... 100% Safety and cost saving!**

Fire protection standards demand functional integrity for 30 minutes for the loudspeaker-groups in all fire sections. This means, that loudspeaker-cabling must maintain its function for 30 minutes in the case of fire (Standard E30). These enormous costs are a thing of the past with the new **g+m** Loop-system. The loop wiring system with separate feed and return lines prevents the loudspeaker from failing even in the case of a fault. Automatic isolation of the problem zone guarantees 100% operational reliability using cost saving standard cabling! **All discontinuity, short-circuits and earth faults are detected interruption free and automatically isolated in case of emergency.**



### **APS-178-16/32-channel interruption free 100-V loudspeaker line monitoring**

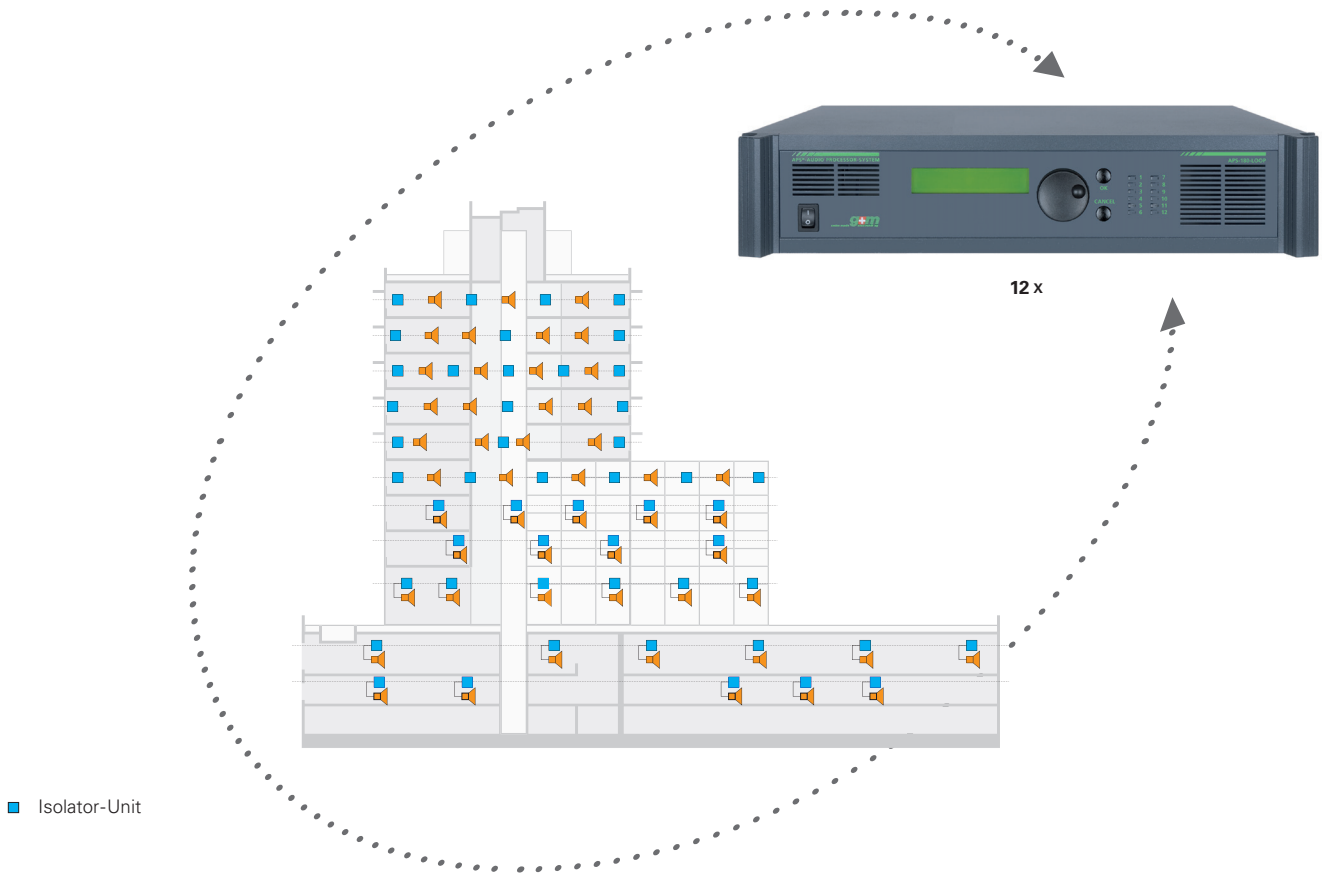
- 16/32-channel interruption free APS®-loudspeaker line monitoring
- 100-V line monitoring for short-circuit / discontinuity / earth fault and loudspeaker failure
- automatic calibration of each individual line
- detailed failure analysis



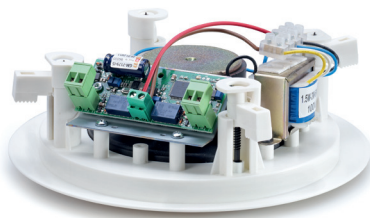
### **APS-180-Loop 12-channel interruption free line monitoring with Loop Wiring System**

- 12-channel interruption free APS®-loudspeaker line monitoring with Loop connectivity
- 100-V line monitoring for short-circuit / discontinuity and earth fault with automatic isolation of the problem zone by Isolator-Unit
- detailed failure analysis
- Bi-directional communication up to the external isolators

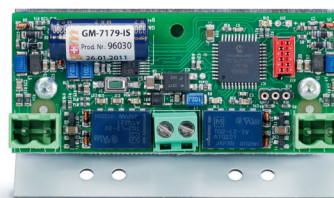
# g+m Loop System – 100% Safety and cost saving



- no need for expensive E30-cabling
- optimal safety due to redundant connection (Loop)
- interruption free line monitoring for discontinuity, short circuit and earth fault
- no need for local power supply
- fault detection by each loudspeaker-Isolator-Unit within NEN 2575 standard
- automatic isolation of the problem zone by Loudspeaker-Isolator-Units
- up to 12 Loops per device
- with 2 – wire Standard cable 2 x 1.5mm<sup>2</sup>
- up to 800 Isolators per System with low current < 1mA
- Bi-directional communication between system– and isolator unit
- automatic addressing of all units for easy installation
- max. loop length up to 1000m



**GM-xxxx-loudspeakers**  
with integrated dedicated  
Isolator-Unit for automatic  
isolation of the problem zone



**GM-7179-IS**  
Isolator-Unit for auto-  
matic isolation of the  
problem zone