

## Evacsound PA

- **High quality public announcement system**
- **Synchronized system**
- **Simple update Interface**
- **Self-calibrating**
- **Lower costs**
- **Two-way communication**

Evacsound PA is a distributed system for public address messaging in road and railway tunnels, mineral mines and industrial passageways.

Each node is a networked industrial computer system in a fire retardant, sealed polycarbonate enclosure. Proper right side of node is equipped with a directional speaker array allowing for efficient sound delivery and actualisation of binaural acoustic effects. With precise synchronization the delivered audio quality is supreme in the whole span of the tunnels, with little echo, fewer dead zones and negligible overlap.

The nodes are placed along a passageway with a fixed interval 25-30m. With the usage of sensitive MEMS microphones and sensors, the node can calculate the true interval between themselves reducing installation costs by eliminating the need for precise measurements. Additionally, the node support two-way communication and with the help of an external button the node can double as a half-duplex speaker-phone.



## Technical Specifications

**Weather resistance:** Dust and waterproof to IP66k

**Operating temperatures:** -25° C to + 65° C  
Relative humidity high: 93% R.H at 40° C (non condensing)

**Casing material:** Polycarbonate

**SPL:** @1.5m in a 9.5m tunnel profile 99dB

**Color:** Black with transparent diffusers on the sides.

**Weight:** 5.02 kg approx

**Power supply:** 48V DC input, or Power over Ethernet (802.3bt ultra-PoE)

**Power consumption:** 6W idle, 10W start-up, 50W Max.

**Inrush Current:** 0.2A@48V

**Overload current protection:** Present

**Connection:** 100 Mbit RJ45 ethernet sealed with an IP67 plug, 12-pin cable with configurable signals for external control nodewise and 2-pin power cable.

**Quality of Service (QoS):** Ensuring optimal delivery of voice

**Type of Service (ToS):** high throughput and reliability (RFC3168)

**SIP** (Session Initiation Protocol) RFC3261, used for two-way communication.

**Voice calls:** Half duplex voice call feature.

**Microphone:** MEMS microphone

**Inbuilt redundancy:** Node can connect to a secondary central, should the primary go down.

**Self-monitoring and fault check**

**functions:** automatic health-check and fault detection for increased performance.

**PTP:** Synchronization with a grand master clock for superb audio performance.

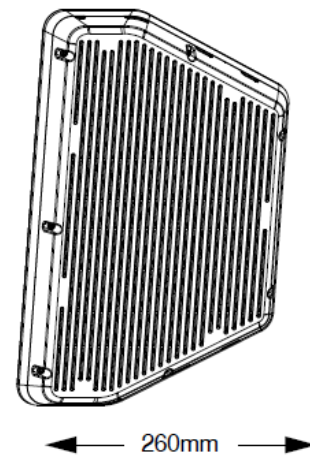
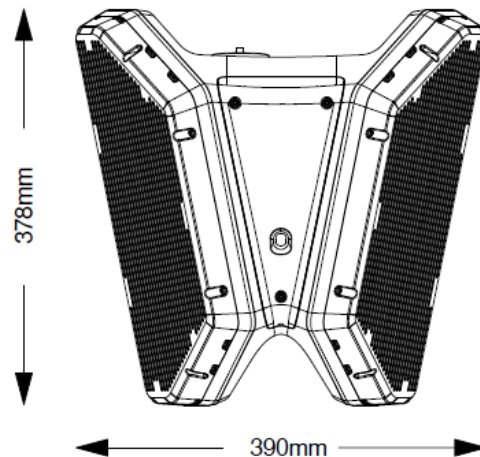
**Configuration:** Proprietary configuration and self-calibrating algorithm, for measurement of adjacent node distance. Reduces installation cost

**Accessories:** 12Pin cable.

**Remote management:** Managed by an Evacsound central, which manages updates and operation.

**Options:** Temperature accusation, voice-call, light control.

## Dimensions



## Approvals

EN 50121-4:2016, A1:2019 - Railway Applications

EN 50130-4:2011, A1:2014 – Electromagnetic compatibility for components of fire.

EN 55032:2015 AC:2016, EN 55035:2017 AC:2019 - Electromagnetic compatibility of multimedia equipment

## Order Code

Evacsound PA 1020260

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