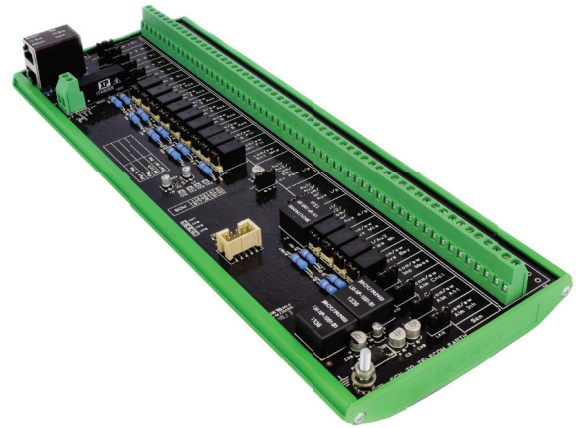# Sonix™ Io

PA/GA input output unit

Overview

Sonix™ Io unit is a compact, DIN mountable, high efficiency input output termination device. Designed to work with the 2Mx matrix, the Sonix™ Io unit provides connection to external interfaces inbound and outbound to the PA/GA system.

Features

- Compact and efficient DIN rail mount fixing
- Configurable via Sonix™ Software
- Low rack footprint
- Comprehensive interface connectivity
- Provides interface to fire & gas system
- Interface to entertainment system
- Interface to telecoms management system (TNMS)
- Dual auxilliary audio and keyline inputs into PA/GA system
- Audio output with keyline
- Design focused MTBF/MTTR
- Operating on self-healing ring
- Dual RJ45 connectivity for easy maintenance

The Sonix™ Io unit provides a varied option for site input & output to the Sonix™ PA/GA, including : 6 configurable fire and gas alarm inputs with corresponding acknowledge status outputs, system fault output, entertainment mute, 2 audio inputs and key lines, 1 audio output with key line, ships whistle output, Auxiliary mute output, system busy output, important message input, alarm inhibit input, alarm attenuate input and alarm cancel input.

Sonix™ PA/GA autonomously monitors and supervises the internal cables connected to the Io unit and is fully fail safe, ensuring reliable operation when needed. The Sonix™ Io unit houses a non-volatile and reprogrammable semiconductor enabling custom modifications via Sonix™ configurator where needed without the need for replaceable parts or upgrade site visits. Inputs and outputs can be individually configured as either normally open or closed to suit client installation.

Due to the flexibility of Sonix™, if project specific requirements are needed then can be programmed to provide the required feature to the Sonix™ Io unit without major re-engineering.

Within the Sonix™ central cabinet the Io unit is connected via rapid fit RJ45 connectors ensuring a quick and failsafe connection to the 2Mx matrix. For additional security, this internal connectivity can also be operated on a self-healing ring architecture.

Certifications

Certification	CE, Environmental and EMC (IEC60945)

Specifications

Mechanical / environmental

Fixing	DIN rail security fixing
Weight	540 g
Dimensions (H x W x D mm)	305 x 118 x 54.7
Material	Flame retardant PVC/PA UL94V-0
Operating temp	0 °C up to +55 °C
Operating relative humidity	20 to 95% Non-condensing
Service location	Safe Internal Location
Connectors	Io Bus: rapid fit 8P8C (RJ45) modular jacks Field I/O loops, polyamide screw terminals
Ingress protection rating	IP30

Electrical

Power supply	Regulated 48 Vdc from Pm10 power distribution unit
Consumption	50 mA
Heat	2.5 W
Output terminals	Volt free (max. 24 Vdc/30 Vac)
Input terminals	Volt free contact or voltage driven up to max. 12 Vdc/12 Vac*
Audio sensitivity	0 dBu (770 mV RMS) (Transformer isolated)

General

|	
Inputs	6 x configurable alarm initiates 1 x alarm inhibit 2 x audio + keyline Alarm Cancel, Alarm Attenuate, Important Message
Outputs	6 x alarm acknowledge 1 x audio + keyline 2 x fault indication System Busy, 2 x Entertainment Mute, Ships Whistle

Connectivity (all internal connectivity can be radial or self-healing loops as standard)

Io bus	2 x 1 RJ45, providing 2 internal loops either radial or self-healing loop (see 2mx datasheets)
Field termination	58 x 1 screw terminal blocks, providing termination for up to 2.5mm² cables

*Contact your Eaton sales representative if higher message initiate voltages are required

General arrangement drawing (all dimensions in mm)
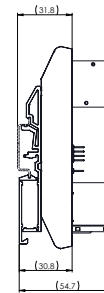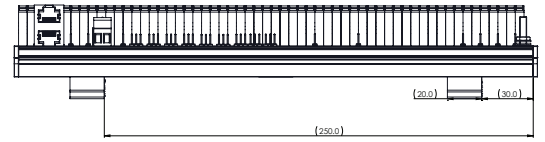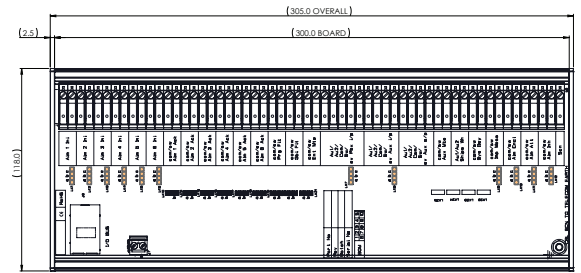
Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

Model
Sonix-Io