AUTROVOICE MULTIVES EXCHANGEABLE MODULES

Voice alarm system
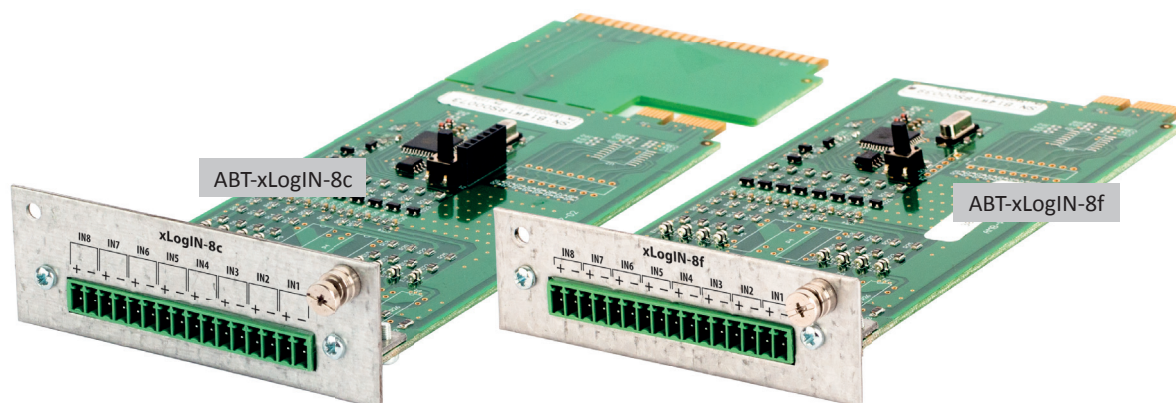**Product Datasheet**

EN 54-16

Logical input card for control slots ABT-xLogIN-8c and for function slots ABT-xLogIN-8f

CE

1488-CPR-0620/W

ABT-xLogIN-8c

ABT-xLogIN-8f

The logical input card for a function or control slot has 8 control inputs which may receive signals from other systems in order to trigger a desired reaction of MULTIVES system. Inputs of an ABT-xLogIN-8c/f card offer two modes of ope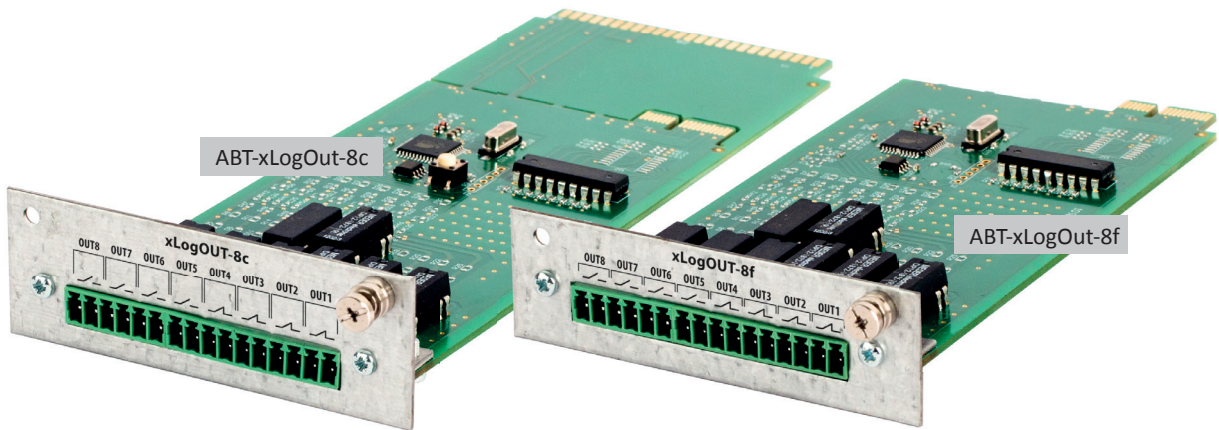ration: contact mode (short / open contact) and monitor mode in which in addition to contact mode function, short circuit and opening of the cables connected to the card are detected.

Technical specifications	ABT-xLogIN-8c / f
Power supply	Internal from the Control Unit
Current consumption	10 mA at 48 V
Number of logic inputs	8
Voltage source	12 V
Types of control logic	NO / NC
The resistance value interpreted as the opening of the line	RL>20k
The resistance value interpreted as a contact close	RL<5k
The resistance value interpreted as a contact open	RK>10k
Operating temperature	0°C / 60°C
Operating humidity	15% to 80% (non-condensing)
Storage temperature	-20°C / 70°C
Storage humidity	5% to 95% (non-condensing)
Type of connector	16-pin screw terminal type PHOENIX, 3.5 mm
Dimensions	ABT-xLogIn-8c – 70 x 215 x 25 (mm) ABT-xLogIn-8f – 70 x 160 x 25 (mm)
Accessories	Connector with screw terminals 16 pins, the distance between the partitions of 3.5 mm

AUTRONICA

CE

Relay output card for control slots ABT-xLogOut-8c and for function slots ABT-xLogOut-8f

CE

1488-CPR-0620/W

ABT-xLogOut-8c

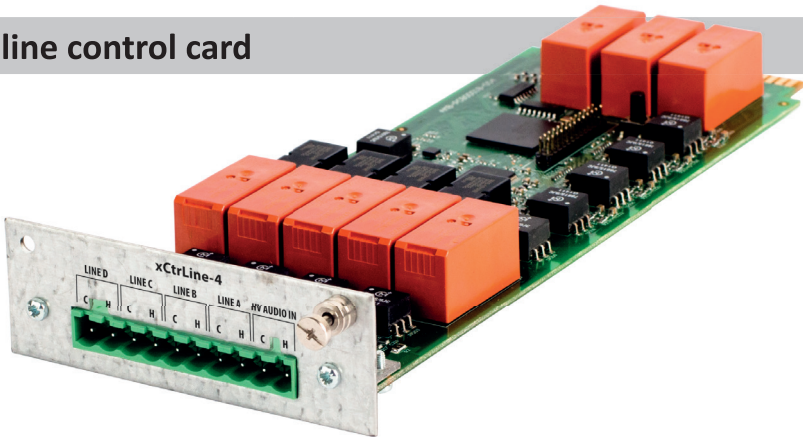ABT-xLogOut-8f

xLogOUT-8c

xLogOUT-8f

The logical output card has eight fully programmable relays which can be used for acknowledge the various states of the Multives outside to other systems. The channels from 1 to 4 are equipped with NC and channels from 5 to 8 with NO type of relays.

Technical specifications	ABT-xLogOut-8c/f
Power supply	Internal form the Control Unit backplane
Power consumption	10 mA at 48 V
Number of logic outputs	8, each output galvanically isolated
Type of outputs	4x NC 4x NO
Connector type	16 pin screw terminal type PHOENIX, 3.5 mm
Switching current (Max.)	0,5 A
Breakdown voltage (Min.)	200 V
Operating temperature	0°C to 60°C
Operating humidity	15% to 80% (non-condensing)
Storage temperature	-20°C to 70°C
Storage humidity	5% to 95% (non-condensing)
Dimensions	ABT-xLogOut-8c – 70 x 215 x 25 (mm) ABT-xLogOut-8f – 70 x 160 x 25 (mm)
Accessories	Connector with screw terminals 16 pins, the distance between the partitions of 3.5 mm

CE

ABT-xCtrLine-4 - 4 loudspeaker line control card

CE

1488-CPR-0620/W

ABT-xCtrLine -4 provides 4 independent speaker line outputs (A, B, C, D). Card allows to switch between main and spare amplifiers. Line measurement methods can be made by: Impedance, Loop or End of Line Module (EOL). The measurement method i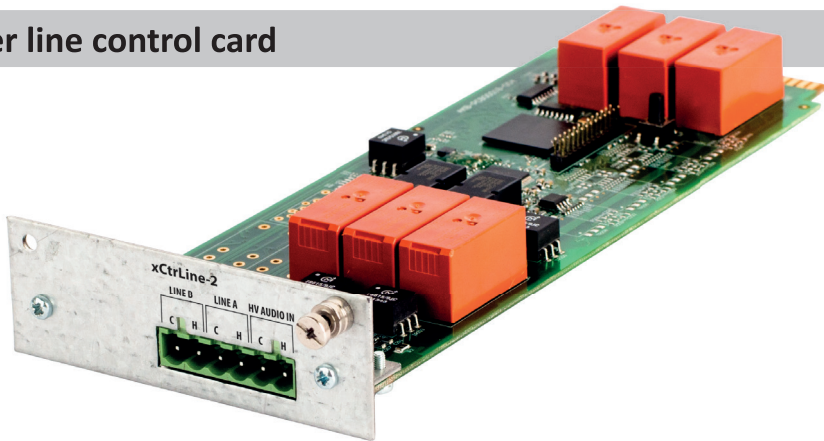s selected from the software configuration. ABT-xCtrLine-4 provides fault detection, opening, ground leakage and surveillance amplifiers on common 100 V Buses.

Technical specifications	ABT-xCtrLine-4
Power supply	Internal form the Control Unit backplane
Power consumption	152 mA for 48 V
Type of connector	10 pin screw terminal type PHOENIX, 5.08 mm
Impedance measurement frequency	1 kHz to 48 kHz
Frequency of the signal for EOL modules	18 kHz to 24 kHz
Maximum measured current	20 A
Maximum measured voltage	200 V
Accuracy of measurement	Up to 5%
Operating temperature	0°C to 60°C
Operating Humidity	15% to 80%
Storage Temperature	-20°C to 70°C (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Dimensions	70 x 215 x 30 (mm)
Accessories	Screw terminals 10 pins, the distance between the partitions 5.08 mm

CE

EN 54-16

ABT-xCtrLine-2 - 2 loudspeaker line control card

CE

1488-CPR-0620/W

ABT-xCtrLine -2 provides 2 independent speaker line outputs (A, B). Card allows to switch between main and spare amplifiers.

Line measurement methods can be made by: Impedance, Loop or End of Line Module (EOL).
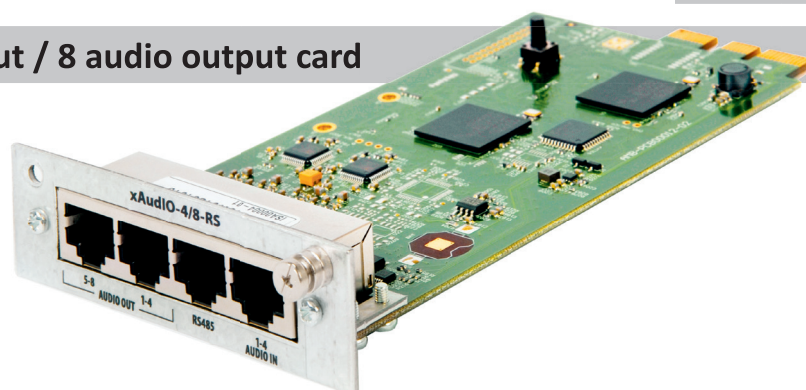The measurement method is

selected from the software configuration. ABT-xCtrLine-2 provides fault detection, opening and ground leakage.

Technical specifications	ABT-xCtrLine-2
Power supply	Internal form the Control Unit backplane
Power consumption	121 mA for 48 V
Type of connector	6 pin screw terminal type PHOENIX, 5.08 mm
Impedance measurement frequency	1 kHz to 48 kHz
Frequency of the signal for EOL modules	18 kHz to 24 kHz
Maximum measured current	20 A
Maximum measured voltage	200 V
Accuracy of measurement	Up to 5%
Operating temperature	0°C to 60°C
Operating Humidity	15% to 80%
Storage Temperature	-20°C to 70°C (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Dimensions	70 x 215 x 30 (mm)
Accessories	Screw terminals 6 pins, the distance between the partitions 5.08 mm

CE

ABT-xAudIO-4/8-RS - 4 audio input / 8 audio output card

CE

1488-CPR-0620/W

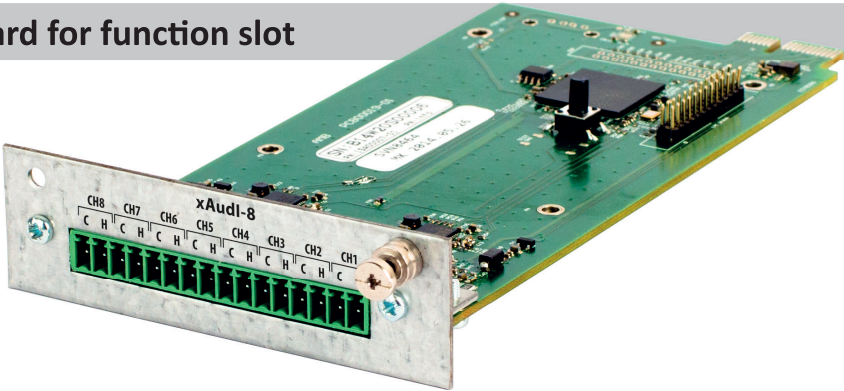This audio intput/output card is destined for a function slot of ABT-CU-11LCD. It offers 4 line audio inputs via an RJ45 conector as well as 8 symmetrical outputs via an RJ45 connector for leading out audio signals to the external devices or amplifiers of the MULTIVES system. The card is also equipped with an RS485 interface with the help of which the MULTIVES system can be controlled or integrated with devices offered by other producers.

Technical specifications	ABT-xAudIO-4/8-RS
Power supply	Internal form the Control Unit backplane
Power consumption	430 mA for 5 V
Audio input	
Number of audio inputs	4
Type of audio inputs	differential
Connector type	1x RJ45
Input impedance	≥ 10 kΩ
Maximum input voltage	≤ 3 Vrms
Audio outputs	
Number of audio outputs	8
Type of outputs	Balanced
Connector type	2x RJ45
Frequency response	40 Hz … 20 kHz (@1dB) / 400 Hz … 8 kHz (@0,1dB)
Harmonic distortion (THD+IMD)	≤ 0,05%
Headroom	10 dB
SNR	≥ 90 dB
Channel separation	≥ 80 dB
Output impedance	600 Ω
RS485 interface	
Number of sockets	1x RJ45
Baud rate	≥ 19200 bps
Operating temerature	0°C to 60°C
Operating humidity	15% to 80% (non-condensing)
Storage temperature	-20°C to 70°C
Storage humidity	5% to 95% (non-condensing)
Dimensions	70 x 160 x 25 (mm)

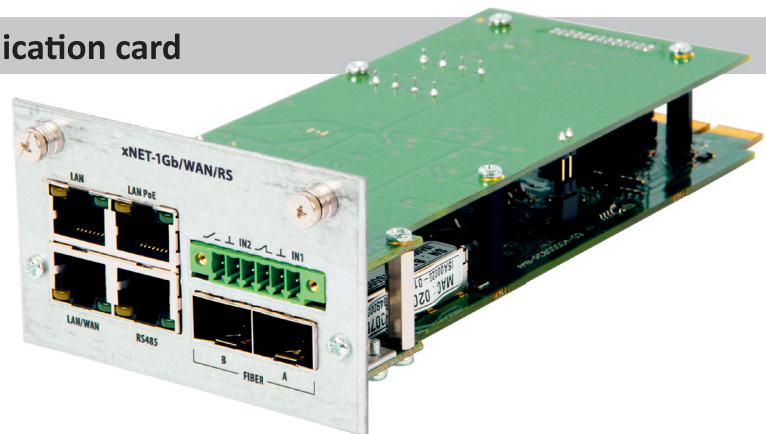## ABT-xAudI-8 - 8 audio input card for function slot

C€

1488-CPR-0620/W

Technical specifications	ABT-xAudI-8
Number of audio inputs	8
Type of audio inputs	differential
Connector type	16-pin screw terminal type PHOENIX, 3.5 mm
Input impedance	≥ 10 kΩ
Maximum input voltage	≤ 3 Vrms
Operating temperature	0°C to 60°C
Operating humidity	15% to 80% (non-condensing)
Storage temperature	-20°C to 70°C
Storage humidity	5% to 95% (non-condensing)
Dimensions	70 x 160 x 25 (mm)

This audio input extension card is destined for a function slot of ABT-CU-8 LCD. It offers 8 symmetrical line audio inputs via an RJ45 connector.

CE

EN 54-16

ABT-xNET-1Gb/WAN/RS - Communication card

CE

1488-CPR-0620/W

ABT-xNET is a communication card consists of two independent 1 Gb network switches. Network switch no. 1 is destined solely for transition of data connected with the basic functionality of the MULTIVES system, i.e. working of the emergency sound system and

AVB operation, whereas network switch no. 2 is used for remote connections. This card operates TCP/UDP/PTP/DHCP protocols and assures CPU-OFF based audio data exchange by means of a protocol developed by Ambient System. In addition the card has an RS485
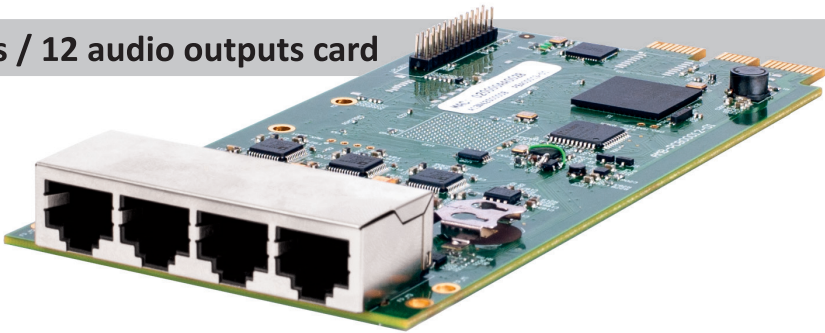
port enabling implementation and integration of the MULTIVES system with any other systems, e.g. FAS, by means of exchangeable libraries with protocol descriptions. Another functionality is a POE splitter for providing power to, among others, fireman microphones.

Technical specifications	ABT-xNET-1Gb/WAN/RS
Power source	Internal control unit
Current consumption	48 V – 700 mA / 12 V depends on the extension / 5 V approx. 1100 mA (typical 730mA / I / O expansion / PoE – Power maximum 300 mA, typical power consumption depends on the devices connected to the card with RJ45 connector (PoE) max. 15 W
Fiber Module	SFC modules / connecter SC/LC / multimode or single-mode / E 30 or E 90, OM or OM2
Number of I / O logic	2 independent channels / galvanically isolated / each channel is independently configurable as input or output / outputs NO / NC
Stimulation of parametric input voltage	12 V
Source impedance force	10 kΩ
Parametric input source	Passive standard resistors 10k 10kΩ || 4k99, detection thresholds 0/1 / open / set in the application configuration
Type of socket I / O logic	6-pin screw terminal type PHOENIX, 3.5 mm
PoE output voltage, nominal load	48 V, 0.3 A load
Maximum cable length for RS485	1200 m (according to. specifications and characteristics of RS485)
Operating temperature	0°C / +60°C
Operating humidity	15% to 80% (non-condensing)
Storage temperature	-20°C / +70°C
Storage humidity	15% to 80% (non-condensing)
Dimensions	70 x 160 x 30 (mm)

CE

EN 54-16

ABT-cAudIO-4/12 - 4 audio inputs / 12 audio outputs card

CE

1488-CPR-0620/W

Technical specifications	ABT-cAudIO-4/12
Power supply	Internal form the Control Unit backplane
Power consumption	430 mA for 5 V
Audio input	
Number of audio inputs	4
Type of audio inputs	differential
Connector type	1x RJ45
Input impedance	≥ 10 kΩ
Maximum input voltage	≤ 3 Vrms
Audio outputs	
Number of audio outputs	12
Type of outputs	Balanced
Connector type	3x RJ45
Frequency response	40 Hz … 20 kHz (@1dB) 400 Hz … 8 kHz (@0,1dB)
Harmonic distortion (THD+IMD)	≤ 0,05%
Headroom	10 dB
SNR	≥ 90 dB
Channel separation	≥ 80 dB
Output impedance	600 Ω

- Integrated with ABT-xNET card of the ABT CU-11LT
- 4 line audio inputs and 12 symmetrical outputs via an RJ45

The audio input/output card is integrated with ABT-xNET communication card of the ABT CU-11LT. It offers 4 line audio inputs via an RJ45 connector as well as 12 symmetrical outputs via an RJ45 connector for leading out audio signals to the external devices or amplifiers of the MULTIVES system.

CE

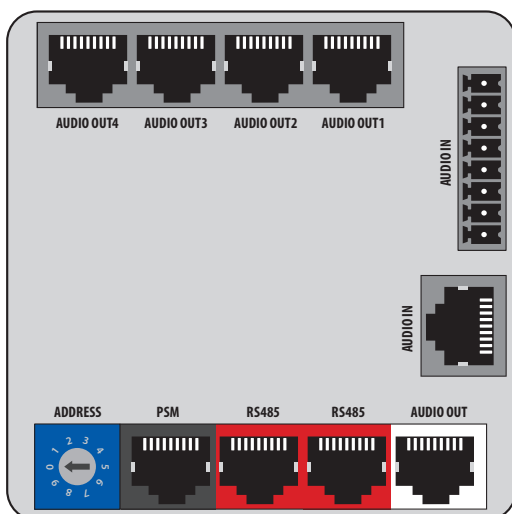## ABT-ISLE - Audio / RS485 Interface

CE

1488-CPR-0620/W

The ABT-ISLE allows integration with other interfaces and different devices using RS485 protocol. It's also audio cable splitter from 1 x RJ45 consisting 4 analog audio channels coming out from Audio Out on CU to 4 x RJ45 where each of RJ45 includes 1 audio channel for amplifier input. Unit housing is designed for rack rails TH 35. Address of the ABT-ISLE must be unique and can be set by dedicated

Addressing POT (16 addresses 0-F). First module in chain has to have address 0.

Local AUDIO IN
For easier and faster connection of audio sources you can use 8 pin Phoenix type connector. LOCAL AUDIO IN on 8 pin Phoenix connector is connected directly with LOCAL AUDIO OUT on RJ-45.

Audio OUT 1-4
4x RJ-45 for connecting audio signal to amplifiers

PSM
RJ-45 for connecting with the power manager ABT-PSM48.

Product name	Part number	Description
ABT-xNET-1Gb/WAN/RS	116-AVT-XNET-1GB/WAN/RS	Communication card
ABT-xCTRLN-4	116-ABT-XCTRLN-4	4 loudspeaker line control card
ABT-xCTRLN-2	116-ABT-XCTRLN-2	2 loudspeaker line control card
ABT-xAudIO-4/8-RS	116-ABT-XAUDIO-4/8-RS	Function card 4 IN / 8 OUT Audio / RS485
ABT-xAudI-8	116-ABT-XAUDI-8	Function card 8 IN Audio
ABT-xLogIN-8f	116-ABT-XLOGIN-8F	8 logical inputs card (function slot)
ABT-xLogOUT-8f	116-ABT-XLOGOUT-8F	8 logical outputs card (function slot)
ABT-xLogIN-8c	116-ABT-XLOGIN-8C	8 logical inputs card (control slot)
ABT-xLogOUT-8c	116-ABT-ABT-XLOGOUT-8C	8 logical outputs card (control slot)
ABT-ISLE	116-ABT-ISLE	Audio / RS485 interface