zenitel

DATASHEET



1008122010

TFIE-1

IP and SIP Intercom

- CCoIP/VoIP intercom for industrial environments
- Dual Ethernet connectivity for redundant networks
- ONVIF Compatible
- PoE powered
- Auxiliary DC power for redundancy
- DIP functionality for use with AlphaCom audio servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dual relay outputs
- 6 configurable I/Os
- Dust- and water-protected to IP 66
- Accessories include Handheld PTT, Headset with ON/OFF and PTT and Handset with PTT
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel

Industrial Intercom | UL Certified Intercom | IP66 | Automatic Volume | HD Voice | Automatic Gain Control

Active Noise Cancelling | Open Duplex | Voice Activity Detection

Description

The TFIE-1 IP industrial intercom station is a rugged device, designed for harsh environments and meets industrial and offshore requirements. The plastic housing is designed to withstand most chemical and environmental hazards found on- or offshore. The TFIE-1 features a full keypad with one programmable button + keys for manual override (PTT) and Cancel.

The intercom station is fully digital and offers crystal clear audio with high output through a 10 W internal amplifier and 78 mm speaker, offering up to 100dB SPL. Active Noise Reduction and Acoustic Echo Cancelling allows for hands-free two-way communication with superior audio quality. Intercom status indicators display the status of the system and are compatible with AlphaCom and Exigo systems as well as SIP functionality for use with 3rd party systems.

See also: additional documentation on wiki.zenitel.com

Technical Dimensions

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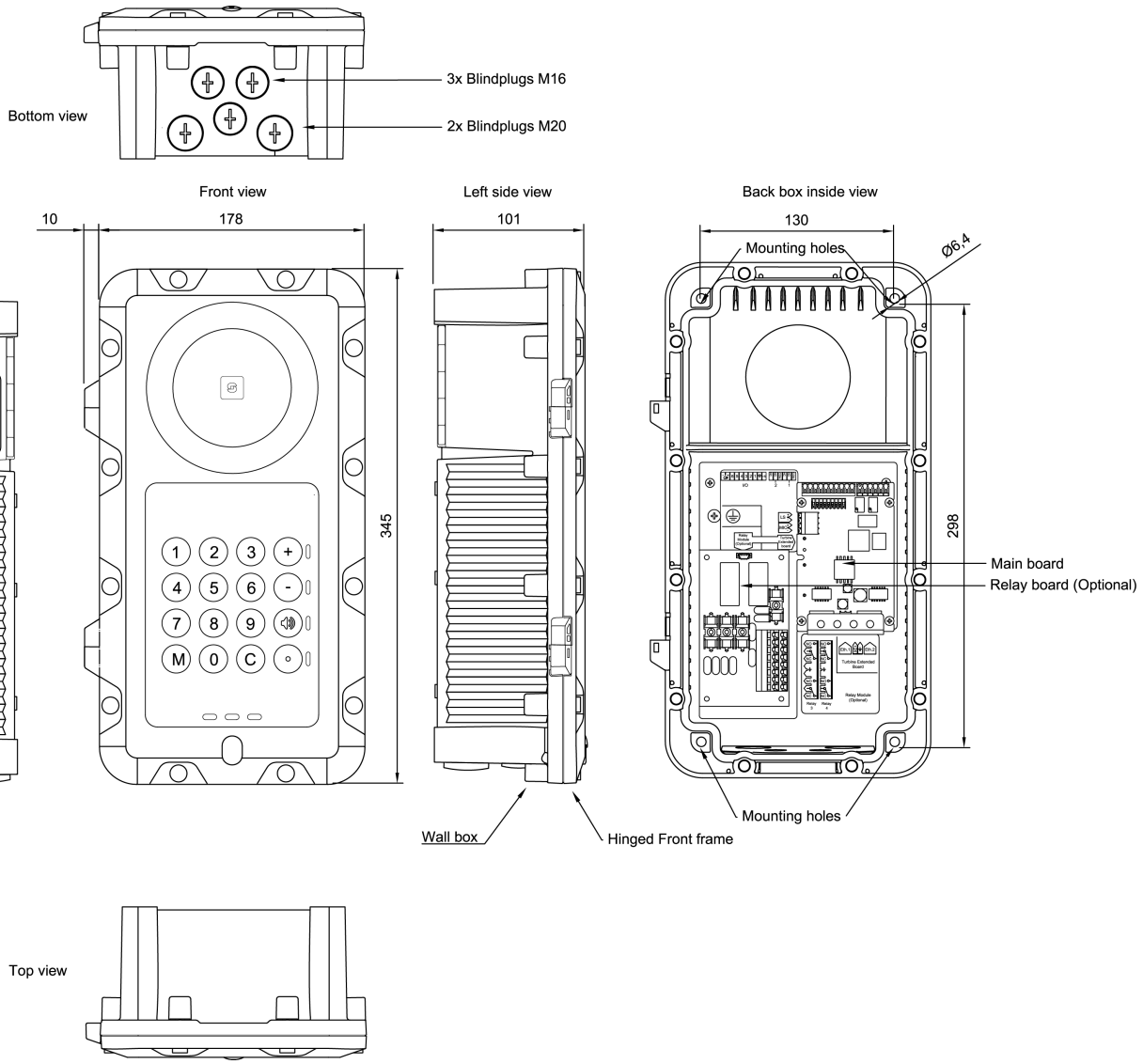

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Specifications

AUDIO	
Noise cancelling - suppression of musical noise	YES
Noise cancelling - suppression of static noise	YES
Noise cancelling - suppression of rapidly changing noise	YES
Codecs	G.711, G.722, G.729
Frequency range, G.722 Codec	200 Hz – 7000 Hz
Audio technology	Modes: Full open duplex, switched open duplex
	Adaptive jitter filter
	Local tone generator
	Audio mixing - 3 channels
	Sound level detection (scream alarm)
	Automatic gain control (microphone)
	Automatic volume adjustment
Internal speaker amplifier	10 W class D
Automatic Volume Control (AVC)	Undistorted and clear audio
Acoustic Echo Cancellation (AEC)	Prevents audio feedback even at high volumes (95dB)
10W Speaker	Matches 10W amp for distortion-free broadcast level sound

MECHANICAL	
Dimensions	345 x 178 x 101 mm
Weight	1.9 kg
Mounting	On-wall box (included)
Color	Yellow + Black

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ORDER NUMBER	ORDER NUMBER DESCRIPTION
1008122010	TFIE-1 Full keypad with 1 programmable key
1008122020	TFIE-2 6 labelled programmable keys
ACCESSORIES	
1023594100	1023594100 EGA-1 Button protection (10x) for TFIE/TFIX/EAPII/EAPFX
1023533312	EMMAI-2H Handheld Industrial Microphone, Compact, Waterproof for EAPII/TFIE
1008140100	TA-10 Connection board with relays for TFIE/EAPII
1008140225	TA-22b 10m cable and plugbox w/PTT for Industrial headset (for TFIE)
1008140230	TA-23 Industrial/Marine Handset w/PTT (for TFIE)
1008140250	TA-25 Set of replacement screws (M6) for TFIE/TFIX/EAPII/EAPFX
1008140260	TA-26 Set of cable glands for TFIE/EAPII
AK5850HS	A-Kabel TwinCom Headband Headset ATEX

ENVIRONMENTAL	
Operating temperature	-40°C to +70°C (-40°F to +158°F)
Storage temperature	-40°C to +70°C (-40°F to +158°F)
Operating humidity	10% to 95% RH (non-condensing)
Storage humidity	10% to 95% RH (non-condensing)
Air pressure	600 hPa to 1200 hPa
IP-rating	IP-66 tested acording to IEC/EN 60529

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ELECTRICAL

Ethernet connector	2 x RJ45
Power options	PoE or external power supply
PoE (Power over Ethernet)	IEEE 802.3af standard, Class 0 (0.44W to 12.95 W)
Auxiliary DC power	24 VDC nom (16 to 48 VDC)
Power consumption	2 W (idle) to 12,9 W (max)
Built-in switch	Managed, DHCP, Firewall
Compatibility	SIP, ICX-AlphaCom, IC-EDGE, G.711, G.722, G.729, HD Voice
Handheld Microphone	Microphone (bal), PTT
Handset	Microphone (bal), Speaker (bal), + PTT
Headset	Microphone (bal), Speaker (bal) + PTT
Digital inputs/outputs	6 (configurable input/output/LED-driving)
Relay outputs	2 (250VAC/200VDC, 2A, 60W, 10^8 operations)
Audio	Line-in, Line-out
Aux power	1 (tool-free terminals)

NETWORKING AND PROTOCOLS

Ethernet	10BASE-TX, 100BASE-TX , Auto negotiation, Auto MDIX
Protocols	IPv4 (with DiffServ), SIP, TCP, UDP, HTTPS, TFTP, RTP, DHCP, SNMP, ONVIF, CCoIP® , NTP
LAN protocols	Power over Ethernet (IEEE 802.3 a-f) Network Access Control (IEEE 802.1x)
Management and operation	HTTP/HTTPS (Web configuration) DHCP and static IP + IC-EDGE Remote automatic software upgrade Centralized monitoring
Advanced supervision functions	E.g. network test, tone test, status reports
SIP support	RFC 3261 (SIP base standard)
	RFC 3515 (SIP refer)
	RFC 2976 (SIP info)
DTMF support	RFC 2833, 2976 (SIP info)

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CERTIFICATIONS	
Immunity	EN 60945, EN 50130-4, EN 61000-6-1, EN 61000-6-2, FCC-47 part 15B
Emission	EN 60945, EN 50130-4, EN 61000-6-3, EN 61000-6-4, FCC-47 part 15B
Certificates	UL 60950-1, cUL 60950-1, CB to IEC 60950-1

OTHER SPECIFICATIONS	
Warranty	2 Years standard warranty, extendible up to total of 5 years (additional fee)

Accessories



EMMAI-2H

Handheld Compact Industrial Microphone For Exigo/Turbine

Item Number: 1023533312



TA-23

Industrial Handset for Turbine with PTT

Item Number: 1008140230



TA-22B

Industrial Plugbox & Cable for Headset with PTT

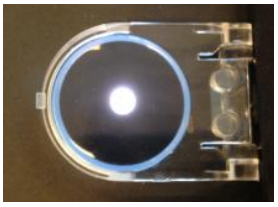
Item Number: 1008140225



TA-10

Relay Module

Item Number: 1008140100



EGA-1

Button Protection Covers

Item Number: 1023594100

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