

ExResistTel IP2 explosion proof VoIP-Telephone

Explosion-proof, weatherproof industrial
VoIP telephone for use in potentially
explosive areas (zone 1, 2, 21 and 22)



Overview

With approved technology of FHF, the ExResistTel IP2 is suitable for all indoor and outdoor installations.

The new ExResistTel IP2 is the ideal device for every weather and a number of different operation sites, including exposure to seawater, high humidity or extensive mechanical strain. The housing is made of impact and shock-resistant glass-fibre reinforced polyester, it is resistant to acids, alkalis or lubricants.

Its robust design represents a perfect packaging for the latest requirements for IP telephones in hazardous environments with proven reliability for critical mission communications and high safety applications.

The ResistTel IP2 is designed to provide ultimate user comfort meeting industrial standards and decades of market leading expertise and know-how. It features a display with integrated heating for ultra low temperature environments.

Features

- Protection class IP66 according to IEC60529
- Ambient temperature
-40 °C to +60 °C
with armoured cord
-30 °C to +60 °C with spiral cord
- Ring tone ≥ 95 dB(A) in 1 m distance
- Pixel-based illuminated LCD display
- V4A alphanumeric keypad
- Web-based monitoring (operating, handset-, hands-free and ringing function)
- User-friendly menu structure
- Standard protocols
H.323, SIP, TSIP, SIPS and H.450
- Power supply: PoE or external
- Connection to 10/100-BASE-T Ethernet
- Hands-free operation
- Two built-in independent relay contacts



Certifications

Protection type	II 2 G Ex e [ib] mb IIC T4 Gb
	II 2 D Ex tb [ib] IIIB T135 °C Db

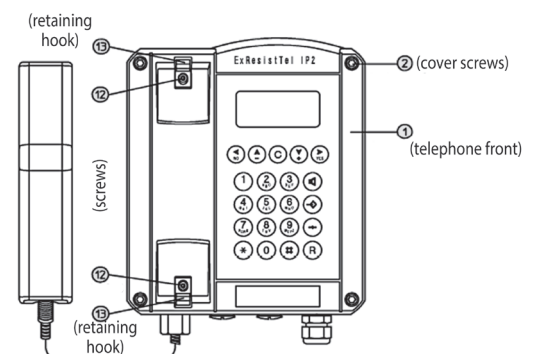
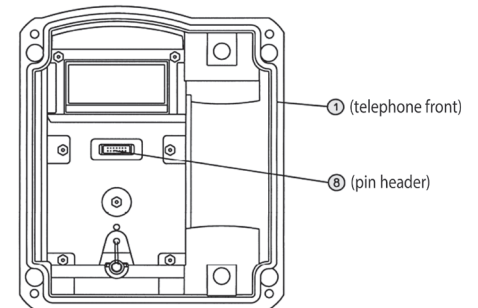
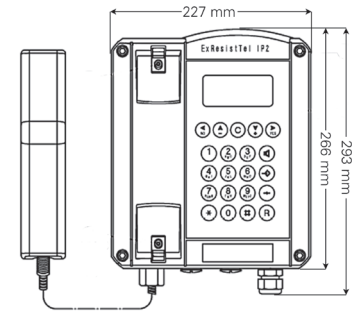
Technical features

Protocols	H.323, SIP, TSIP, SIPS
General	H.323 version 4 including H. 225, H.235, H.245 and RAS Gatekeeper routed signalling, H.450, session initiation protocol (SIP) RTP, SRTP real time protocol – for voice data transmission
RTCP	Real time control protocol – first level of quality of service
RAS protocol	Support for external gatekeeper
DTMF	H.245 “alphanumeric” or “signal type”
Additional VoIP features	H.245 fast connect enblock dialing overlapped sending
Security	Encoded password authentication according to H.235
Quality of service	Prioritization of IP packages over TOS and DiffServ VLAN priority according to IEEE 802.1p/802.1q
Voice codecs	G.711 A-law/ μ -law (64 kbps), G.729A (16 kbps)
Echo compensation	G.168
Access	Via HTML web browser Password-protected with secure authentication
Troubleshooting	Log and trace files, status displays of interfaces and connections Ping connection test for internet protocol, sending of SNMP traps
Updates	Configuration recording/reading Boot code and firmware update via HTML upload Automatic update via update server
DSL access	PPPoE protocol
VPN	Tunneling with PPTP encoding via MPPE
NAT	Network address translation – for translation of official IP addresses into non-official addresses and vice versa
DHCP	Dynamic host configuration protocol – IP interfaces settings
ICMP	Internet control message protocol - for ping tests
Call tone generation	Automatic call tone generation according to European and US standard
Call transfer	Call transfer, in all usual variants: with/without consultation call, before/after answer etc.
Call diversion	Call diversion/redirection
Hold	Call hold/retrieve
Call waiting	Call waiting, with respective indication to calling subscriber
Message	Message display on telephone
Pickup	Display indicating that a call can be picked up
Pickup list	Display listing the calls which can be picked up
Name display	To determine the displayed name
Callback	Call completion, with all common variants such as call back when busy and call back when free
Three-party conference	Conference with 3 subscribers, also external subscribers
Caller ID	For separate indication of call numbers or groups
Multiple registration	Up to 6 registrations
Telephone book	Automatic availability of all registrations in central telephone book, integration of external data bases via LDAP
Time	Exact time information via time server access
Hands-free operation	For use without handset
Headset operation	For use with headset, connectable on terminals

Specifications

Power supply	Power over ethernet according to IEEE 802.3af over spare cable pair or external supply DC 19.2 V to 52.8 V		
Power consumption PoE	12.95 W		
Connection	Port (10/100 Mbit/s)		
Ringing volume	Max. approx. 95 dB(A) in 1 m distance		
Housing	Material: Glass fibre reinforced polyester		
Height x width x depth	293 x 227 x 135 mm		
Weight (standard model)	Approx. 5,000 g		
Display	182 x 64 pixels		
Operating position	Vertical wall mounting		
Relay switching capacity	250 V AC	5 A	100 VA
	30 V DC	5 A	100 Watt
	230 V DC	0,5 A	100 Watt
	50 V DC	1 A	50 Watt
Headset	Mouthpiece: Electret microphone		
	Earpiece: Dynamic capsule with magnetic field generator		
Stabilization bracket	Standard equipment		
Ambient temperature	-40 °C to +60 °C for devices with steel armoured cord -30 °C to +60 °C for devices with polyurethan spiral cord		
Protection class	IP66 according to IEC 60529		
Impact resistance	IK09 according to EN IEC 62262:2002		

General arrangement (all dimensions in mm)



Ordering requirements

Type	Designation	Model	Article number
ExResistTel IP2	VoIP telephone	black with steel armoured cord	FHF 112 861 80
ExResistTel IP2	VoIP telephone	black with polyurethan spiral cord	FHF 112 861 81
Accessories			
	Ex headset		FHF 112 861 04
	Ex II secondary sounder		FHF 211 842 06
	Telephone hood model 404	galvanized steel, yellow	FHF 118 901 01
	Telephone hood model 404	V4A stainless steel	FHF 118 901 11
	Telephone hood model 404	synthetic material, orange	FHF 118 901 12
	Telephone hood model 404	synthetic material, yellow	FHF 118 901 13
	Telephone hood model 404	galvanized steel, red	FHF 118 901 14
	Telephone hood model 404	synthetic material, red	FHF 118 901 15
	Telephone hood model 404	GRP, yellow	FHF 118 901 22
	Telephone hood model 404	GRP, orange	FHF 118 901 23
	Console for model	Yellow	FHF 118 901 03
	TWIN-EExII		FHF 118 833 ..*

transparent	11
red	12
amber	13
green	14
blue	15

* The full article number for the TWIN EEx is made up by appending the colour code to the article numbers given beside.

Accessories

Ex headset



TWIN EEx



Protection hood

