

# ResistTel IP4 weatherproof VoIP-telephone

IP telephone for indoor and outdoor use



## Overview

With improved technology, the FHF ResistTel IP4 is a weatherproof VoIP telephone suitable for outdoor installation.

The ResistTel IP4 is the ideal device for use in rough environmental conditions found in various industrial areas and operational sites. Resistant to seawater, high humidity or extensive mechanical strain, it provides the highest level of safety and reliability.

The housing is made of impact and shock-resistant plastics. With the use of corrosion-free material, this telephone is made for longevity in mind with resistance to acids, alkalis and lubricants. Its robust design represents a perfect packaging for the latest requirements for VoIP telephones combined with proven reliability for critical mission communications and high safety applications.

This telephone is designed to provide ultimate user comfort with a user-friendly menu structure and easy installation. The ResistTel IP4 meets industrial standards and has decades of marketing leading expertise. It features a luminous display that's able to function in ultra low temperatures, a connectable headset is available as an accessory and a hands-free operation is available.

## Features

- Protection class IP 66 according to IEC60529
- Ambient temperature -40 °C to +70 °C
- Ring tone  $\geq 95$  dB(A) in 1 m distance
- Pixel-based luminous OLED display
- V4A alphanumeric keypad
- User-friendly menu structure
- VoIP Protocols: SIP, H.323 (UDP, TCP, TLS), RTP, SRTP (SDES, DTLS), RTCP, ICE
- Power supply: PoE or external
- Connection to 10/100/1000-BASE-T Ethernet
- Relay built-in (SPST)
- Relay module (optional) 2x SPDT
- Hands-free operation

## Technical feature

<b>Power supply</b>	Power over Ethernet according to IEEE 802.3af via 48 V DC PoE power supply (44V min, 57V max)	
<b>Voltage external power supply</b>	22,8 VDC - 53 VDC	
<b>Power consumption</b>	4 W (POE class 0)	
<b>Connection</b>	2x RJ45 Port (10/100 /1000 Mbit/s)(1x PoE)	
<b>Ringing volume</b>	Max. approx. 95 dB(A) in 1 m distance	
<b>Housing</b>		
<b>Material</b>	Glass fibre-reinforced polyester	
<b>Height x width x depth</b>	293 x 227 x 135 mm	
<b>Weight (standard model)</b>	Approx. 5,000 g	
<b>Display</b>	128 x 64 pixels (OLED)	
<b>Operating position</b>	vertical	
<b>On Board Relay (standard)</b>		
<b>Switching voltage</b>	AC	30 V
	DC	60 V
<b>Switching current</b>	AC	1.0 A
	DC	1.0 A
<b>Switching capacity</b>	AC	15 VA
	DC	15 W

### Relay 1 and Relay 2 (optional)

<b>Switching voltage (Vswitch)</b>	AC	250 V
	DC	230 V
<b>Switching current</b>	AC	5,0 A
	DC	5,0 A
<b>Switching capacity</b>	AC	Vswitch ≥ 35V 15 VA
	AC	Vswitch < 35V 100 VA
	DC	Vswitch ≥ 50V 15 W
	DC	Vswitch < 50V 100W

### Inputs 1-3 (optional)

<b>Open circuit voltage</b>	22.8VDC - 57.0 VDC
<b>Short circuit current</b>	< 10 mA (internally limited)

### Handset

<b>Mouthpiece</b>	Electret microphone
<b>Earpiece</b>	Dynamic capsule with magnetic field generator for inductive coupling of hearing aids
<b>Stabilization bracket</b>	Standard equipment

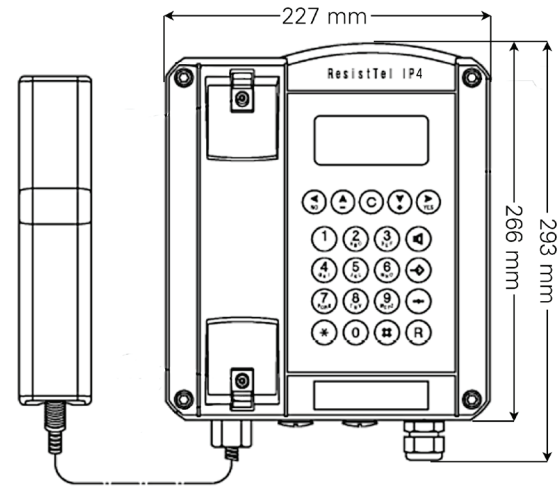
### Environmental conditions

<b>Ambient temperature</b>	-40 °C to +70 °C
<b>Transport and storage</b>	-40 °C to +70 °C
<b>Humidity</b>	5 to 85% RH (Avoid icing and condensation)
<b>Protection class</b>	IP 66 according to IEC 60529
<b>Impact resistance</b>	IK 09 according to EN IEC 62262:2002

## Characteristics

<b>Protocols</b>	VoIP Protocols: SIP, H.323 (UDP, TCP, TLS), RTP, SRTP (SDES, DTLS), RTCP, ICE
<b>DTMF</b>	In-Band, Out-Of-Band, Event
<b>Additional VoIP features</b>	H.245 fast connect enblock dialing overlapped sending
<b>Security</b>	Encoded password authentication according to H.235
<b>Quality of service</b>	Prioritization of IP packages over TOS and DiffServ, VLAN priority according to IEEE 802.1p/802.1q
<b>Voice codecs</b>	G.711 A-law/μ-law, G.729A, G.722, OPUS (NB/WB)
<b>Administration</b>	Access using https, Password-protected with secure authentication
<b>Diagnostic tools</b>	Log and trace files (pcap), status displays of interfaces and connections Ping connection test, sending of SNMP traps
<b>Updates</b>	Configuration recording/reading Boot code and firmware update via HTML upload Automatic update via update server
<b>DSL access</b>	PPPoE protocol
<b>VPN</b>	PPP over PPPoE/PPTP
<b>NAT</b>	Yes
<b>DHCP</b>	Client with private option codes, server mode
<b>Call tone generation</b>	Automatic call tone generation according to European and US standard
<b>Multiple registration</b>	Up to 6 registrations
<b>Telephone book</b>	internal, centralized (optional), integration of external data bases via LDAP
<b>Time</b>	NTP

General arrangement (all dimensions in mm)



# Ordering requirements

Type	Designation	Model	Article Number
ResistTel IP4	VoIP telephone	black with 2x LAN	FHF 114 411 220
ResistTel IP4	VoIP telephone	red with 2x LAN	FHF 114 411 222
ResistTel IP4	VoIP telephone	black with relay + 2x LAN	FHF 114 412 220
ResistTel IP4	VoIP telephone	red with relay + 2x LAN	FHF 114 412 222
ResistTel IP4 ZB	VoIP telephone	black without keypad, with relay + 2x LAN	FHF 114 412 120

Accessories			
	Headset		FHF 112 643 04
	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
	TWIN LED 24 VDC		FHF 118 823.. *
	TWIN LED 100...253VAC	only for variants with relay contact	FHF 118 827.. *

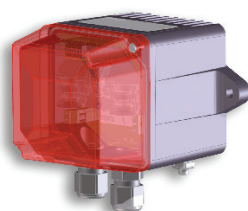
transparent	01
red	02
amber	03
green	04
blue	05

\*The full article number for the TWIN is made up by appending the colour code to the article numbers given. AC version only for variants with additional relay.

## Accessories



Headset



TWIN LED



Protection hood