

# Weatherproof Telephone FernTel IP4

VoIP-Telephone for indoor and outdoor applications



## Overview

With FHF approved technology, the FernTel IP4 is suitable for outside installation. It's the ideal weatherproof VoIP desk/wall telephone for applications in potentially harsh and rough environments in many industrial applications — no matter if exposed to seawater, high humidity or extensive mechanical strain.

The elegant housing is manufactured from polycarbonate: an impact-resistant thermoplastic. The FernTel IP4 provides durability and longevity while minimising the need for maintenance.

The FernTel IP4 provides highly effective ergonomics with an intelligent user-friendly menu structure and easy installation and maintenance. The illuminated keypad and luminous display ensures visibility in low light environments.

The Ethernet connectivity with the internal 2-port switch allows the user to connect a laptop in an outdoor area which then obtains network access through the telephone. The FernTel IP4 offers high-quality features while meeting industrial standards and provides high quality communication, safely.

## Features

- Ingress protection class IP 65 according to IEC60529
- ambient temperature -40°C to +60°C
- Ringing volume  $\geq 95$  dB(A) in 1 m distance
- Pixel-based luminous OLED display
- Illuminated keypad
- Intelligent and 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

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## Technical feature

<b>Power supply</b>	Power over Ethernet according to IEEE 802.3af via 48 V DC PoE power supply (44 V min, 57 V 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>Ringin volume</b>	Max. approx. 95 dB(A) in 1 m distance	
<b>Housing</b>		
<b>Material</b>	Polycarbonate	
<b>Height x width x depth</b>	293mm x 191mm x 128mm	
<b>Weight (standard model)</b>	Approx. 2.3 kg	
<b>Display</b>	128 x 64 pixels (OLED)	
<b>Operating position</b>	Desk or vertical mounting	
<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 $\geq$ 35V 15 VA
	AC	Vswitch<35V 100 VA
	DC	Vswitch $\geq$ 50V 15 W
	DC	Vswitch<50V 100 VA

### Inputs 1-3 (optional)

<b>Open circuit voltage</b>	22.8 VDC - 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>	Optional

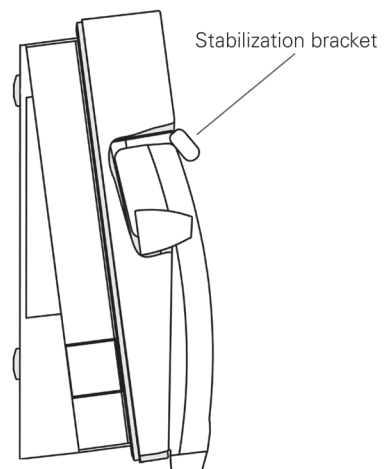
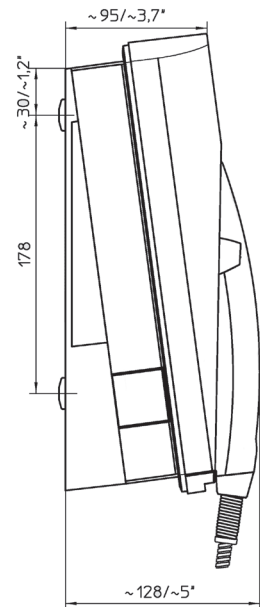
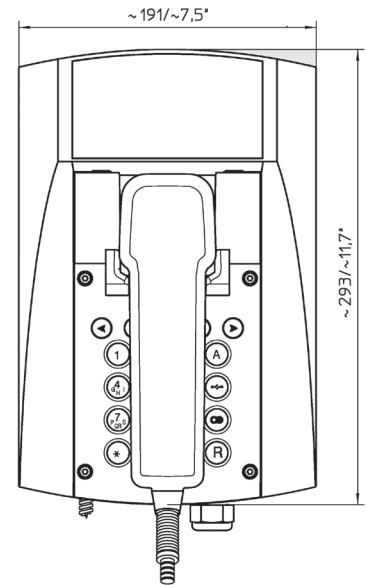
### Environmental conditions

<b>Ambient temperature</b>	-40°C to +60°C
<b>Transport and storage</b>	-40°C to +60°C
<b>Humidity</b>	5 to 85% RH (Avoid icing and condensation)
<b>Protection class</b>	IP 65 according to IEC 60529

## Characteristics

<b>Protocols</b>	VoIP Protocols: SIP, H.323 (UDP, TCP, TLS), RTP, SRTP (SDS, 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/ $\mu$ -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

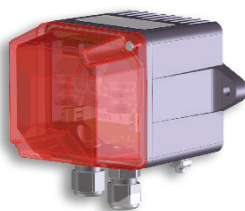
\*The full article number is made up by appending the colour code to the article numbers given below.

Type	Designation	Model	Article Number		
FernTel IP4	Desk/Wall Telephone	with spiral cord	FHF 114 211 21*		
FernTel IP4	Desk/Wall Telephone	with armoured cord	FHF 114 211 22*	black	0
FernTel IP4	Desk/Wall Telephone	with spiral cord and relay	FHF 114 212 21*	yellow	1
FernTel IP4	Desk/Wall Telephone	with armoured cord and relay	FHF 114 212 22*	red	2
Accessories					
	Stabilization bracket		FHF 112 390 00		
	Weatherproof RJ45 LAN plug		FHF 112 390 01		
	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.. *	transparent	01
	TWIN LED 100...253VAC	only for variants with optional relay	FHF 118 827.. *	red	02
				amber	03
				green	04
				blue	05

## Accessories



Headset



TWIN LED



Protection hood