

For areas with explosive atmospheres, Class 1, Div. 2 Groups A, B,C&D T5



## Introduction

This new telephone with a housing made of impact-resistant and shockproof polycarbonate is approved for Class 1, Div. 2.

Within the field of chemical and petrochemical industry combustible atmospheres result repeatedly from procedural progress eventually caused by gas, steam or exhalation.

Due to its striking signal colour the FernTel IP / zone 2 UL cannot be missed whenever a telephone is urgently needed.

Further advantages concerning the employment in areas with high air humidity and explosive atmospheres are given by the use of an impact-proof thermoplastic housing as well as screws made of stainless steel.

The device is easily converted from a wall telephone to a desk telephone.

The FernTel IP / zone 2UL allows efficient working with high comfort completed by the illuminated keypad and display. The standardized features according to H.450 are supported.

The FernTel IP / zone 2UL offers features of high quality based on industrial standards instead of proprietary solutions.

## Features

- Protection degree Type 3
- Ambient temperature -4°F to +32°F
- Call tone  $\geq 95$  dB(A), 1 m
- Explosion protection Class 1, Div. 2 Groups A, B, C & D T5
- Pixel-based, illuminated LCD Display
- Illuminated keypad
- Intelligent and user-friendly menu structure
- Standard H.323, SIP, TSIP, SIPS protocols
- Power supply Power over Ethernet
- Connection to single 10/100-BASE-T Ethernet LAN

Application Example:

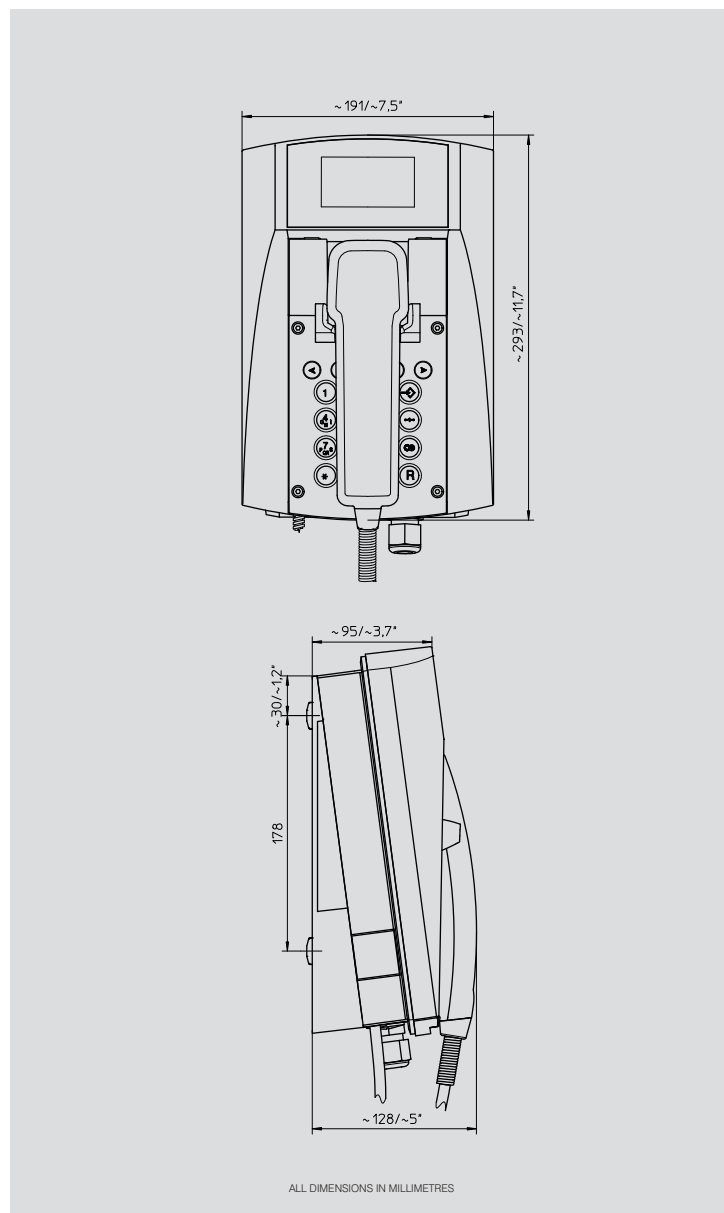
### Telephones in Class 1, Div. 2

The new FernTel IP / Zone 2 UL is the ideal telephone for many different work areas.



# Certification and Specification

Explosion protection:	Class 1, Division 2, Groups A, B, C, D T5.
Temperature Range:	-4°C to +32°C.
Housing:	Polycarbonate.
Keypad:	with stainless steel plate.
Housing Dimensions:	height x width x depth 293 x 191 x 128 mm.
Weight:	approx. 2.4 kg.
Protection Degree:	Type 3.
Power Supply:	Power over Ethernet (IEEE 802.3af).
Connection:	10/100-BASE-T Ethernet LAN.
Ringing Volume:	approx. 95 dB(A) at 1 m distance.
Display:	128 x 64 Pixel.
Protocol:	H.323, SIP, TSIP, SIPS.
Total:	H.323 version 4 incl. H.225, H.235, H.245 and RAS Gatekeeper routed Signalling, H.450 Session Initiation Protocol (SIP) RTP, SRTP Real Time Protocol. Real Time Control Protocol – first level of Quality of Service. Protocol Support for External Gatekeeper.
RTCP:	H.245 Alphanumeric or Signal Type.
RAS:	H.245 Fast Connect En-block dialling Overlapped Sending.
DTMF:	Password Protected Administration.
Additional VoIP-Features:	Password Authorization acc. to H.235.
Security:	Priority of IP-Packages acc. to TOS and DiffServ, VLAN Priority acc. to IEEE 802.1p / 802.1q.
Encoded:	G.711 A-law / $\mu$ -law (64 kbps), G.723.1 (5.3 kbps), G.729A (16kbps).
Quality of Service:	G.168.
Voice Encoding:	via HTML Web-Browser.
Echo Compensation:	Password protected authentication.
Access:	Log- and Trace-Files, State Display of Interfaces and Connections, Ping Connection Test sending of SNMP Traps over Internet Protocol.
Troubleshooting:	Configuration recording/reading, Boot code and firmware update via HTML upload, Automatic update via Update-Server.
Update:	PPPoE Protocol.
DSL-Access:	Tunnelling with PPTP Encoding via MPPE.
VPN:	Network Address Translation – for Transformation of official IP Addresses into private IP Addresses and vice versa.
NAT:	Dynamic Host Configuration Protocol – IP interfaces settings.
DHCP:	Internet Control Message Protocol – for Ping tests.
ICMP:	Automatic Dial tone Generation European and US Standard.
Dial Tone Generation:	Call Transfer with/without consultation call.
Call Transfer:	Call Diversion Unconditional, Busy, No Reply.
Call Diversion:	Call Hold / Retrieve.
Call Hold / Retrieve:	Waiting inclusive Signalling of second Call Information.
Call Waiting Call:	Name Display.
Call Waiting Call:	3 Party Conference of internal and/or external Subscriber.
Calling Name Identification:	Display of Calling Number.
3 Party Conference:	up to 6 Registrations.
Calling Number Identification:	Local, Integration of an External Database.
Multiple Registrations:	Exact Time and Date Information via Time Server.
Telephone Book:	
Time/Date:	



## Ordering Information

The full article number is made up by appending the colour code for the coloured housing to the article number given here (-).  
 Yellow 1 | Red 2 | Black 0 | For example **F11241141** = yellow FernTel IP with spiral cord.

Type	Name	Version	Article no.
FernTel IP / Zone 2 UL	Desk/Wall Telephone	with spiral cord	F112 411 4 (-)
FernTel IP / Zone 2 UL	Desk/Wall Telephone	with armoured cord	F112 431 4 (-)

All specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice.  
 No liability is accepted for any consequence of use.

