

Weatherproof Hands-free Fibre Optic Telephone



- Weatherproof
- Hands-free and Hot-Line (Central Battery Operation)
- 90dBA loudspeaker output
- Pseudo-Full-Duplex communication
- Long Fibre Optic Line capability
- Extremely rugged construction
- Increased safety
- Highly reliable operation & low cost of ownership
- Colour Yellow RAL1021
- Optional TUFTEST facility for reporting of faults (Self-Test)

Key Information

The Tuftel IPF8196 is an advanced concept hands-free Fibre Optic I.P. (Internet Protocol) telephone combining superb acoustic reproduction from the latest electronic technology within a heavy duty vandal resistant enclosure. Tuftel IPF8196 is also sealed to provide water resistance for external use in hostile environments.

The Tuftel IPF8196 external case is manufactured from polyester powder coated cast aluminium of approximate

dimensions 370/170/130 mm, providing IP65 minimum protection to the electronics.

The enclosure has four 6.5 mm fixing holes on its rear for secure wall mounting. Brackets can be supplied for 100mm post mounting.

Associated with Tufstest software, the Tuftel IPF8196 can optionally perform an automatic test of its primary functions and digitally reports to a remote computer.

Applications

• Railways • Metros • Roads • Airports • Tunnels • Power Stations

Architects' and Engineers' Specification

IP65 sealed weatherproof telephone manufactured from powder coated cast aluminium. The telephone is equipped with a hands-free speakerphone system, able to perform advanced functions such as remote self-testing and line reversal detection. Efficient and user-friendly during emergency calls thanks to a single push-button.

The telephone is Hot Line (CB) and is designed to be connected to most PABX available on the market via a FO Cable

Tuftel IPF8196Nem

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Input/Output Connection

All connections to the unit are made via optional sealed glands on the bottom of the case.

Push Button

The mechanical push-button is non-latching and is vandal and water jet (IP65) resistant.

Microphone

A highly reliable IP65 dynamic microphone is used with vandal resistant protection by metallic grille.

Loudspeaker

A highly reliable IP65 electromagnetic loudspeaker is used with vandal resistant protection by metallic grille.

Electrical Safety

Included in the unit are the electrical connections to earth, that ensure the safety of the calling party when touching the enclosure, fascia, etc.

Electronic Circuitry & Components

Every component has been carefully chosen and subsequently evaluated. The telecommunication components mounted on the PCB are the latest technology. To minimize component count and hence increase the reliability of the telephone, integrated circuits, mainly CMOS and surface mounted are used wherever possible. Some standard integrated circuits and some specific telephony integrated circuits are used.

Optional Extra Features

- Automatic test of telephones primary functions and reporting to a remote computer.
- Vandal protected loudspeaker and microphone.
- Wall mounting with four M6 holes.
- U-Bolt fixing to 100mm post.
- Custom front label

General Specifications	
Enclosure Material / Finish	Cast Aluminium Alloy, Polyester Power Coated Yellow (RAL 1021)
Dimensions (mm)	(H)370x(W)170x(D)130 (without brackets and glands etc.)
Weight (kg)	6.0 Kg approx. (without brackets)
Temperature Range	from -20°C to +50°C (with internal heater) from 0°C to +50°C (without internal heater)
Relative Humidity	5% to 95% (non-condensing)
Degree of Protection	IP65 (typical)
Cable Entries	Dual M20 x 1.5 tapped gland holes. Optional M20x1.5 glands fitted. Recommended-Brass gland for S.W.Armoured Cable - ac supply. -Plastic gland for Fibre Optic Cable
AC Power Supply	110 / 230vac 50/60Hz @ nominal current (Internally derived power supply of 12VDC)
F.O. Interface	1310nm single mode (SC) [20 km/12.4 miles]
F.O. Specification	Min TX PWR: -15 dBm Max TX PWR: -8 dBm RX Sensitivity: -31 dBm Max In PWR: -8 dBm Link Budget: 16.00 dB
F.O. Internal Status LEDs	LED colours are Green Fibre Link On indicates fibre link up Active On indicates Local unit Off-Hook Power On indicates power is on
Internal Telephone Line Voltage	48VDC (±20%) with line current = 20mA minimum
Internal Telephone Line Impedance	600 Ohms
Loudspeaker Output	90dBA at 30cm (with 40mA current) 48VDC
Audible Caller	Piezo electric sounder
Ring Tone SPL	80dB at 1m (typical) with 75V rms ringing voltage
Ring Frequency	Typically 15 - 30 Hz. (Reproduces frequency detected at PABX end)
Ring Cadence	Reproduces cadence detected at PABX end
Standard Tuftel 8196 Order code	8196-1000-1000