
Weatherproof Hands-free Telephone



- Weatherproof
- Hands-free and Hot-Line (Central Battery Operation)
- 90dBA loudspeaker output
- Pseudo-Full-Duplex communication
- Long Fibre Optic Line option
- 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 8150 is an advanced concept hands-free telephone with optional Fibre Optic I.P. (Internet Protocol) combining superb acoustic reproduction from the latest electronic technology within a heavy duty vandal resistant enclosure. Tuftel 8150 is also sealed to provide water resistance for external use in hostile environments.

The Tuftel 8150 external case is manufactured from a heavy duty ABS of 5mm approximate thickness. It has

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 8150 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 4mm ABS. 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, optionally via a FO Cable instead of the normal Telephone cable.

Tuftel 8150

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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. (Latching option available)

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 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 circuits are used wherever possible. Some standard integrated circuits and some specific telephony integrated circuits are used.

Optional Extra Features

- Automatic test of the 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	4mm ABS typically Yellow (RAL 1021)
Dimensions (mm)	(H)370x(W)170x(D)130 (without glands & FO Option etc.)
Weight (kg)	2.0 Kg approx. (without brackets)
Temperature Range	from -20°C to +50°C (with internal heater for FO Option) from 0°C to +50°C (without internal heater for FO Option)
Relative Humidity	5% to 95% (non-condensing)
Degree of Protection	IP65 (typical)
Cable Entries	Dual M20 x 1.5 gland holes. Optional M20x1.5 glands fitted. Recommended-Brass gland for S.W. Armoured Cable - ac supply. (FO Option) -Plastic gland for Fibre Optic Cable Option
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 Tone Frequency	Typically 15 - 30 Hz. (Reproduces frequency detected at PABX end)
Ring Tone Cadence	Reproduces cadence detected at PABX end
F.O. Options	
F.O. Interface (Option)	1310nm single mode (SC) [20 km/12.4 miles]
F.O. Specification (Option)	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 (Option)	LED colours are Green Fibre Link On indicates fibre link up Active On indicates Local unit Off-Hook Power On indicates power is on
AC Power Supply (Optional)	110 / 230vac 50/60Hz @ nominal current (Internally derived power supply of 12VDC)
Standard Tuftel 8150 Order code	8150-1000-1000

In the interests of product improvement we reserve the right to change specification or design without prior notice.