

Weatherproof Hands-free Telephone



- **Weatherproof**
- **Hands-free and Central Battery operation (Hot-Line)**
- **90dBA loudspeaker output**
- **Pseudo-Full-Duplex communication**
- **Long telephone line capability**
- **Extremely rugged construction**
- **Increased safety**
- **Highly reliable operation & low cost of ownership**
- **Colour Yellow RAL 1021**
- **Optional TUFTEST Software for reporting of faults (self-test)**

Key Information

The Tuftel 8196 is an advanced concept hands-free telephone combining superb acoustic reproduction from the latest electronic technology within a heavy duty vandal resistant enclosure. Tuftel 8196 is also sealed to provide water resistance for external use in hostile environments.

The Tuftel 8196 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 are supplied for 100mm post mounting.

Associated with Tuftest software, the Tuftel 8196 performs an automatic test of its primary functions and digitally reports to a remote computer.

Applications

- **Railway Crossings • Airports • Tunnels • Power Stations • Ships**

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 Central Battery (CB) and is designed to be connected to most PABX available on the market.

Tuftel 8196

Input/Output Connection

All connections to the unit are made via optional sealed glands on the underside 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.

Extra-features

- Factory adjustable automatic on-hook timer.
- Vandal protected loudspeaker and microphone.
- Wall mounting with four M6 holes.
- U-Bolt fixing to 100mm post (parts supplied).
- Custom front label ⁽¹⁾

General Specifications	
Enclosure Material / Finish	Cast Aluminium Alloy, Polyester Power Coated Yellow (RAL 1021)
Dimensions (mm)	(H)370 x (W)170 x (D)130
Weight (kg)	5.8 approx. (without brackets)
Temperature Range	from -20°C to +50°C
Relative Humidity	to 95% (non-condensing)
Degree of Protection	IP65 (typical)
Cable Entries	Single cable entry for sealed M20 gland
Power Supply	Drawn from the telephone line
Loudspeaker output	90dBA at 30cm (with 40mA current)
Nominal Line Voltage	48VDC (±20%) with line current = 20mA minimum
Line Impedance	600 Ohms
Audible Caller	Piezo electric sounder
Ringtone SPL	80dB at 1m (typical) with 75V rms ringing voltage
Standard Tuftel 8196 Order code	3071001

Note:

(1) Subject to minimum order quantities

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