



Discovery Pro GSM-R/GPRS & GPS DATA SHEET

TWIG Discovery Pro is an advanced communication device that combines a triple band GSM mobile phone with a high performance GPS receiver and Twig Telematics (MPTP). The GSM-R version supports the frequency bands used by the international communication standard for railway communications and applications. These features, and the unique TWIG SOS button, make the TWIG Discovery Pro ideal for locating phone users and increasing their safety in addition to allowing them to be supervised and directed to a desired position also within railway industry. The device can be configured for several different business applications including personal tracking for resource management and as a safety device for lone workers. Twig Discovery Pro GSM-R doesn't support ASCII or other GSM-R features, but allow to use the handset with railway specific networks.

Safety and Security

TWIG Discovery Pro is an ideal portable safety device for solitary workers and people who may be at risk. Discovery Pro can be configured to connect to emergency centre by the user by pressing the TWIG Alert button – this will send an SOS message and/or open a voice connection to the predefined emergency number. The SOS message will include location, time, speed, direction and battery status to help to track the user.

Man Down Alert

Twig Discovery Pro with Man Down Alert brings the emergency messaging to next level from user operated alarm button that is standard feature in all Twig handsets. Man Down Alert module will launch emergency cycle when predefined parameters are met on in-built accelerometer.

Personnel and Resource Management

With communication, positioning and telematic capabilities and full portability from the one device TWIG Discovery Pro makes most expensive resource management packages unnecessary. Using the TWIG Discovery Pro businesses can track not only their fleet but also their personnel such as servicemen, policemen or couriers and all with the same application.

Personal surveillance online

TWIG Internet Services allows you to track TWIG users from a PC. The internet interface allows you to track and locate someone carrying the TWIG Discovery Pro via any web browser, providing you with peace of mind as to their location and current status. You can also use your own corporate back end systems and connect via SMS or TCP/IP to Twig Discovery Pro.

Phone features

The TWIG Discovery Pro has been designed to include the phone features required by businesses. The TWIG Discovery Pro features a calendar – including appointment manager and email functionality. It has Bluetooth connectivity and is WAP enabled.



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Discovery Pro

GSM-R/GPRS & GPS DATA SHEET

Mechanics

(not including protective casing)

Indented display window

Weight: 128g

Length: 116mm

Width: 51mm

Thickness: 24mm

Wireless Network Standard

Tri-Band GSM/GSM-R/GPRS

900/1800/1900Mhz

GPRS Multi Slot 10/Class B

Compliant to GSM phase 2/2 +

USSD

Output Power

2W for GSM/GSM-R 900

1W for GSM 1800/1900

Hardware

ARM9 application processor,
variable speed 13MHz...312MHz

10MB of internal user memory

MiniSd card support up to 1GB card

Audio

Codecs HR/FR/EFR/AMR

Speaker phone operation

Display

2" TFT display

176 x 220 pixels within 262k colors

Antenna

GSM: Integrated antenna

GPS: High sensitivity, integrated,
quad helix antenna

GPS

12 channel high performance

receiver

Accuracy ~5m, 95% of time (Open

sky)

Acquisition Rate (Open sky,

receiver

stationary)

- Cold Start 45sec (typical)

- Warm Start 38sec (typical)

- Snap Start 2-8sec (typical)

- Reacquisition 0.1sec (typical)

Advanced power saving methods

Telematics features

Twig Telematics (MPTP), a

sophisticated set of Telematic

commands.

Locating commands

Tracking commands

Emergency commands

Status commands

Remote configuration

GPS tracelog

Accessory layer connector for

embedded "accessories" such as

motion sensor

Operating Times**

Standard battery li-ion 1000mAh.

Stand-by: up to 180hrs

Talk time: up to 7hrs

GPS operating time with 60 seconds

interval: 24hrs

Charging time: <2 hrs for 100%

Security

- PIN codes

- Fixed dialing

- SIM card/network lock

- User Interface / Menu locks

Controls

- Vibrating Alert

- Sound/GPS profiles

- Keypad/phone lock

- Dedicated TWIG Alert button

- Menu/application switcher key

- Volume level keys

Messaging

- Concatenated SMS: Send and

- receive up to 2800 characters in one

- message consisting of several

- ordinary messages

- Send to multiple recipients

- Predictive text input: Support for

- major European languages

- MMS (Multimedia messaging)

- E-mail client (POP3/IMAP/SMTP)

- Cell broadcast

- SMS/MMS unified Inbox

Integrated Software

- Mobile Internet, WAP Browser 2.0

- Contacts book

- Six Games

- PIM applications (Calendar, notes,

- converter, calculator)

- Dual zone clock with 3 alarms with

- snooze capability

- Communication log with

- missed/received/dialled call lists

- SIM application toolkit

- GPS monitor

- GPS Profiles menu allowing the user

- to add and customize GPS operation

- Twig SOS - Advanced emergency

- messaging application

- TWIG Status - management

- messaging application

Connectivity

- USB/Bluetooth to a PC application

- Browsing XHTML (WAP 2.0)

- Bluetooth Data exchange

- Bluetooth headset connection

- Synchronisation with MS Outlook

- /Lotus Notes via TWIG PC Tools***

- Internal I²C data bus for 3rd party

- custom hardware modules. e.g motion

- sensor, RF receiver

Accessories

- Windscreen mount car cradle

- Cigarette lighter adapter

- Personal hands free

- USB cable

- Carrying case

- PC Tools SW

- Bluetooth headset

- Protective rubber casing

- Motion sensor and verticality switch

- for automated emergency messaging

- Mini SD card for data, map and

- application storage

Some of the features and services described in this datasheet are subject to country roll out and might not be available during launch of the product. Please consult your local dealer or GeoSentric for details. ** operating times are subject to networks, operating environment & needed performance ***limited support for versions & synchronisation data fields may apply