TPL — Systèmes de communications

eDMR XTENDED

DM3G

eDMR Mobile Terminal

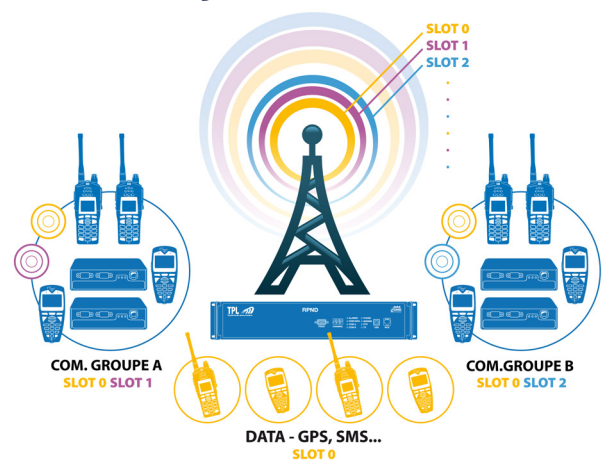### Digital TDMA Technology combined with Analogue Technology

Mobile terminal **DM3G** is the latest digital radio using high spectrum efficient TDMA technology designed by **TPL Systèmes**. Capable of operating in analogue as well as in digital eDMR networks, it offers a great versatility.

The Mobile **DM3G** is equipped with a user-friendly, ergonomic MCE keypad loudspeaker/ microphone built around a large-size backlit alphanumeric display, ideal for the transmission and reception of short data messages and various call modes. The wireless MCE (also available in its cable version) incorporates a BT module with rechargeable battery that provides several hours of operations and guarantees the user cable-and movement-free operating conditions similar to a hand portable, over a distance of about 100m (line of sight) from the vehicle.

A built-in GPS receiver stores GPS data for retrieval or retransmission over the radio network or through the terminals outputs. DM3G can also easily be used only for data transmission as a modem

3 slots TDMA eDMR

SLOT 0
SLOT 1
SLOT 2

COM. GROUPE A
SLOT 0 SLOT 1

COM.GROUPE B
SLOT 0 SLOT 2

DATA - GPS, SMS...
SLOT 0

Caractéristiques

Services	
Call types: - Open channel calls - Individual and privacy calls - Group calls (static and dynamic) - Emergency calls - Include calls - PSTN/ISDN incoming and outgoing calls **Others:** - Priority and pre-emptive calls - Online upgradeable software	**Data:** - Status code transmission - SMS (Short data messages) - 9,6 Kbps (raw) data transmission rate Simplex Mode : - Open channel voice calls - Individual calls **Options:** - Internal GPS

Other features	MCE Keypad Loudspeaker/Microphone with BT
- Aluminium chassis - VSWR protection with detected value display - Power supply protected against inverted polarity, transients an overvoltages (above 17V) - External connections : 1 DB44 and 1 USB **Main chassis dimensions and weight:** - Width : 180 mm - Height : 38 mm - Depth : 177 mm - Weight : 1,5 Kg	- The BT function (wireless) is made up of two modules. The first module is integrated into the MCE unit and the second module is installed in the radio unit. - Powered by a rechargeable polymer lithium battery rechargeable when mounted on its support, the MCE provides 8 hours of operating time.

Technical Radio Specification

Generals:		Receiver:	
- Frequency band	33-50MHz, 68-88 MHz,146-174MHz	- Sensitivity for :	
- Channel number	› 200	Analogue	-115 dBm @20dB SINAD
- Operating mode	Simplex, semi-duplex, duplex	Digital	‹ -117 dBm for BER* 1%
- Channel spacing	12,5 - 20 - 25 kHz	- Intermodulation protection	› 70 dB
- RF power	25 W	- Dynamic RSSI	70 dB
- Power supply	10,8 to 15,5 V	- Crystal filter selectivity	› 70 dB
- Audio power	10 W / 8 Ohms	- Consumption in standby mode	‹ 500 mA
- Raw data rate	9,6 Kbps		
- Operating temperature	-10°C to +70°C	**Complies with standards:**	
- Dust and rain-proof	IP54	- ETS 300 086 - 300 113	
Transmitter:		- ETSI 300-279 - EN 55022- 55024	
- 4 programmable RF levels	5 / 10 / 15 / 25 W	- RED Directive	
- Frequency stability	£ 5ppm		
- Analogue residual noise	‹ -50 dB		
- Transmitting consumption	‹ 5 A		

Modulation Types	Other models
- Digital TDMA - 4FSK - Analog phase modulation (11KOG3E) - Analog selective calls (CTCSS, etc..) - Digital selective calls Digital TDMA - 4FSK - Analog phase modulation (11KOG3E) - Analog selective calls (CTCSS, etc..) - Digital selective calls	- DM3G 50W - eBase desktop station

*BER : Bit Error Rate