

CE DECLARATION OF CONFORMITY

Name of company:

MiX Telematics International (Pty) Ltd t/a Powerfleet

Address:

Blaauwklip Office Park 2,
Cnr Strand Str and Webers Valley,
Stellenbosch, 7600
South Africa

Contact Person: Christo Bothma / De Lliers Geldenhuys

E-mail: Christo.Bothma@powerfleet.com ; Delliers.Geldenhuys@powerfleet.com

Tel: +27 83 384 0596

Product Details:

Trademark: MiX Telematics

Model Number	Product	Part Number	Product Version	BAT	Modem	Magix	PCB SA	PCB Version				
	ELECTRONIC UNIT / KIT			BATTERY 3.2V Li-Ion	Quectel SERIES	SHORT RANGE DEVICE	PCB SUB-ASSEMBLY					
MiX 4452	Electronic Unit	U0187MT	2	N/A	EG915N-EA	434MHz	Z0138MT	1E				
	Kit	U0188MT	2									
MiX 4452-B	Electronic Unit	U0189MT	2	BAT								
	Kit	U0190MT	2									

Technical Description

Product Overview

The MiX 4452 and MiX 4452-B are fleet-management products designed for in-vehicle telematics applications. Each device integrates the core hardware required for vehicle data acquisition, communication, positioning, and peripheral control.

Key Components

The product platform consists primarily of the following elements:

- On-board computer
- Modem and GNSS receiver
- Accelerometer and Bluetooth Low Energy interface
- Input/output interfaces, including 2 x CAN, 2 x RS232, and 4 x positive drives
- Optional 434 MHz short-range transceiver

Variant Difference

The “-B” variant includes an internal backup battery. This battery allows the device to continue operating after the vehicle battery has been disconnected.

Common Hardware, Firmware, and Purpose

Apart from the backup battery fitted to the “-B” variant, the hardware and firmware are the same for both product variants. Their functionality and intended purpose are also equivalent.

Reference Standard Specifications/ Technical Specifications:

GPS Receiver	u-blox ZOE-M8Q
GPS Bands	GPS L1C/A
Bluetooth Bands	2.402 – 2.480GHz, BTLE: <5mW
Short-Range Device	434.3 MHz (Single Channel), Power: 10mW
Power Supply	10.5 to 32VDC; 4.5A max.

The following radio frequencies are used in MiX 4452/-B:

Type of Radio Interface	Mode	Transmit Frequency [MHz]	Receive Frequency [MHz]	Power [dBm]
SRD434	E-GSM	434.1 - 434.5	434.1 - 434.5	<10
Bluetooth BLE	DCS	2402 - 2480	2402 - 2480	<5
Type of Radio Interface	Mode	Transmit Frequency [MHz]	Receive Frequency [MHz]	Power [dBm]
E-GSM 900 MHz (B8)	E-GSM	880 - 915	925 - 960	33
DCS 1800 MHz	DCS	1710 -1785	1805 - 1880	30
Type of Radio Interface	Mode	Transmit Frequency [MHz]	Receive Frequency [MHz]	Power [dBm]
LTE Cat 1 B1	FDD	1920 - 1980	2110 - 2170	23
LTE Cat 1 B3	FDD	1710 - 1785	1805 - 1880	23
LTE Cat 1 B7	FDD	2500 - 2570	2620 - 2690	23
LTE Cat 1 B8	FDD	880 - 915	925 - 960	23
LTE Cat 1 B20	FDD	832 - 862	791 - 821	23
LTE Cat 1 B28	FDD	703 - 748	758 - 803	23

Application of Council Directives

2014/53/EU, Radio Equipment Directive
2014/30/EU, Electromagnetic Compatibility
2011/65/EU and 2015/863/EU, Restriction of Hazardous Substances

We hereby declare that the above mentioned product variants conform to the applicable requirements of EU Radio Equipment Directive 2014/53/EU and Delegated Act (EU) 2022/30 listed below. The following standards and normative documents have been applied:

MiX Telematics International (Pty) Ltd t/a Powerfleet | Registration Number: 1963/006970/07
DIRECTORS: KA BOKABA, HB HORAN



powerfleet.com

Mark	Type	Directive	Standards Applied	Tested At	Date Completed	Test Report name
E11	European Union e-type approval	UN ECE Regulation 10.06: 2019 10R06/00 11693 03	ECE Regulation testing (Emissions and immunity only) covering 3 modes of operation (see below) on an "Non-Immunity" related product: Narrowband emissions - Para 6.5 and 6.6 EM Radiation - Para 6.8 Transient Immunity - Para 6.9 CISPR 25: second edition 2002 and corrigendum 2004 ISO 7637-2: 2004	TUV UK	8-May-24	Document 75951936-17 Issue 04
CE	European Union Radio Equipment Directive (RED) 2014/53/EU	Directive 2013/35/EU Article 3.1a: Electrical Safety	EN 50665: 2017 Human RF Exposure Assessment referencing EN62311:2008 covering all transmitters and including simultaneous transmission assessment.	TUV UK	6-Jun-24	Document 75960378-03
			AS/NZS 62368-1:2022 (IEC 62368-1: 2018 (ED3.0), MOD) Product Safety	EMC Technologies (AU)	24-May-24	M2402036 SAF 62368.1
		Article 3.1b: EMC	ETSI EN 301 489-1: V2.2.3 (2019-11) EMC for Radio Equipment and Services	TUV UK	24-Apr-24	Document 75951936-01 Issue 05
			ETSI EN 301 489-3: V2.1.2 (2021-03) Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz	TUV UK	24-Apr-24	Document 75951936-01 Issue 05
			ETSI EN 301 489-17: V3.2.4 (2020-09) Broadband Data Transmission	TUV UK	24-Apr-24	Document 75951936-01 Issue 05
			ETSI EN 301 489-19: V2.2.0 (2020-09) GNSS Receivers	TUV UK	24-Apr-24	Document 75951936-01 Issue 05
			ETSI EN 301 489-52: V1.2.1 (2021-11) Specific conditions for Cellular Communication Mobile and portable (UE) radio and ancillary equipment	TUV UK	24-Apr-24	Document 75951936-01 Issue 05
		Article 3.2 Radio	ETSI EN 301 908-1: V15.2.1 (2023-01) covering LTE CAT 1 FDD Bands B1, B3, B7, B8, B20 and B28. 4.2.2 Radiated Emissions (UE)	TUV UK	1-May-24	Document 75960378-02 Issue 01
			ETSI EN 301 908-13: V13.3.1 (2024-10) E-UTRA : 4.2.2 Radiated Spurious Emissions (UE) 4.2.4 Control and Monitoring Functions (UE)	Hefei Panwin Technology Co., Ltd.	18-Aug-26	PD20260216-R1A_EN 301908-1, - 13 RF Test Report - rev2
			ETSI EN 301 511: V12.5.1 (2017-03) Radiated Spurious Emissions in allocated GSM 900 and DCS 1800 bands, including voltage extremes of the DC supply (Related ETSI TS 151 010-1: V12.8.0 (2016-05)	TUV UK	30-May-24	Document 75960378-01 Issue 01

			ETSI EN 303 413: V1.1.1 (2017-06) GSM Harmonized EN for GNSS stations in the GSM 900 and DCS 1800 bands	TUV UK	29-May-24	Document 75951936-04 Issue 04
			ETSI EN 300 220-2: V3.1.1 (2017-02) Effective Radiated Power and RF Emissions	TUV UK	29-May-24	Document 75951936-20 Issue 03
			ETSI EN 300 328 : V2.2.2 (2019-07) Bluetooth Spurious Emissions	TUV UK	29-May-24	Document 75953915-05 Issue 03
	European Union Radio Equipment Directive (RED) Commission Delegated Regulation (EU) 2022/30	Article 3.3d	EN 18031-1: 2024 Common security requirements for radio equipment - Part 1: Internet connected radio equipment	Bureau Veritas	19-June-2026	MDE_MIXTEL_2501_Cyber_01
		Article 3.3e	EN 18031-2: 2024 Common security requirements for radio equipment – Part 2: radio equipment processing data, namely Internet connected radio equipment, childcare radio equipment, toys radio equipment and wearable radio equipment	Bureau Veritas	19-June-2026	MDE_MIXTEL_2501_Cyber_01
		Article 3.3f	EN 18031-3 Common security requirements for radio equipment – Part 3: Internet connected Radio equipment processing virtual money or monetary value	N/A	N/A	Device not used to do financial transactions

Signed



Date: 15/09/2026

Place: Stellenbosch

Name: De Lliers Geldenhuys

Position: Hardware Engineering Manager