



Digital Matter  
 The Oval, Kingsmead Block  
 Meadowbrook Street  
 Cnr Sloane Street  
 Bryanston, 2021

Tel: +27 11 540 9260  
 Fax: +27 11 463 5221

[www.digitalmatter.com](http://www.digitalmatter.com)

P.O Box 70732  
 Bryanston, 2021

## EU Declaration of Conformity

We, Digital Matter (incorporated in Republic of Australia) External profit company, Trading as Digital Matter Embedded (South Africa),

of, Kingsmead building, cnr Meadowbrook and Sloane Rd, Bryanston, South Africa, 2021,

Declare under our sole responsibility that the products:

- **GUPPY LoRaWAN; YABBY LoRaWAN**
- **SensorNode LoRaWAN; SensorData LoRaWAN**

are in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive (RED) 2014/53/EU and the restriction of use of certain hazardous substances (RoHS) Directive 2011/65/EU.

Technical Specifications	Product Code	
	GUPPY LoRaWAN	YABBY LoRaWAN
RF Modem/Module:	Murata CMWX1ZZABZ	Murata CMWX1ZZABZ
RF Modem/Module Bands and Power	2 band support: 868/915MHz - EU868 only for Europe - 868 → 870 MHz Band Channel Frequencies - 14dBm typical	2 band support: 868/915MHz - EU868 only for Europe - 868 → 870 MHz Band Channel Frequencies - 14dBm typical
RF Modem/Module Operating Mode:	- FSK, 125KHz BW	- FSK, 125KHz BW
GNSS Receiver:	N/A	u-blox EVA-M8Q
GNSS Bands:	N/A	GPS/QZSS L1C/A, GLONASS L10F, BeiDou B11, Galileo E1B/C, SBAS L1C/A: WAAS, EGNOS, MSAS, GAGAN
Power Supply:	Replaceable 2 x AAA 1.5V Batteries	Replaceable 3 x AAA 1.5V Batteries
Firmware	V1.0	V1.0
Clarification of module function:	RF communication provided by Murata CMWX1ZZABZ	GNSS provided by u-blox EVA-M8Q RF communication provided by Murata CMWX1ZZABZ



Digital Matter  
 The Oval, Kingsmead Block  
 Meadowbrook Street  
 Cnr Sloane Street  
 Bryanston, 2021

Tel: +27 11 540 9260  
 Fax: +27 11 463 5221

[www.digitalmatter.com](http://www.digitalmatter.com)

P.O Box 70732  
 Bryanston, 2021

Technical Specifications	Product Code	
	SENSORNODE LoRaWAN	SENSORDATA LoRaWAN
RF Modem/Module:	Murata CMWX1ZZABZ	Murata CMWX1ZZABZ
RF Modem/Module Bands and Power	2 band support: 868/915MHz - EU868 only for Europe - 868 → 870 MHz Band Channel Frequencies - 14dBm typical	2 band support: 868/915MHz - EU868 only for Europe - 868 → 870 MHz Band Channel Frequencies - 14dBm typical
RF Modem/Module Operating Mode:	- FSK, 125KHz BW	- FSK, 125KHz BW
GNSS Receiver:	u-blox SAM-M8Q	u-blox SAM-M8Q
GNSS Bands:	GPS/QZSS L1C/A, GLONASS L10F, BeiDou B11, Galileo E1B/C, SBAS L1C/A: WAAS, EGNOS, MSAS, GAGAN	GPS/QZSS L1C/A, GLONASS L10F, BeiDou B11, Galileo E1B/C, SBAS L1C/A: WAAS, EGNOS, MSAS, GAGAN
Power Supply:	External Wire: 5-Volt Input (6V ABS MAX) Replaceable 3 x AA 1.5V Batteries	External Wire: 5-Volt Input (6V ABS MAX) Replaceable 4 x C-CELL 1.5V Batteries
Firmware	V1.0	V1.0
Clarification of module function:	GNSS provided by u-blox SAM-M8Q RF communication provided by Murata CMWX1ZZABZ	GNSS provided by u-blox SAM-M8Q RF communication provided by Murata CMWX1ZZABZ

Essential Requirements – Radio Equipment Directive 2014/53/EU	
Health and Safety (Article 3.1a)	EN 60950-1 A2:2013 applies to safety of information technology equipment EN 62479:2010 applies to RF exposure
EMC (Article 3.1b)	EN 301 489-1: V1.9.2 EMC standard for radio equipment and services EN 301 489-3: V1.6.1 Specific conditions for short-range devices operating on frequencies between 9kHz and 40GHz EN 301 489-19: V2.1.0 Specific conditions for GNSS receivers operating in the RNSS band providing positioning, navigation and timing data.
Radio Spectrum Efficiency (Article 3.2)	EN 300 220-1 V3.1.1:2017-02 applies to EMC, Radio spectrum Matters (ERM) & Short Range Devices (SRD); EN 300 220-2 V3.1.1:2017-02 applies to EMC, Radio spectrum Matters (ERM) & Short Range Devices (SRD); EN 303 413: V1.1.1 applies to GNSS Receiver.
Essential Requirements (RoHS) Prevention Article 4.1	EN 50581: 2012 applies to hazardous materials
Article 10(10) and 10(2)	No restrictions on use in any EU member states.



Digital Matter  
The Oval, Kingsmead Block  
Meadowbrook Street  
Cnr Sloane Street  
Bryanston, 2021

Tel: +27 11 540 9260  
Fax: +27 11 463 5221

[www.digitalmatter.com](http://www.digitalmatter.com)

P.O Box 70732  
Bryanston, 2021

The conformity assessment procedure referred in Article 17 and detailed in Annex III of the Directive 2014/53/EU has been followed all technical documentation relevant to the above equipment will be held at:

*Digital Matter,  
The Oval, Kingsmead Block,  
Meadowbrook Street, Cnr Sloane Street,  
Bryanston, 2021,  
South Africa.  
[www.digitalmatter.com](http://www.digitalmatter.com)  
Tel: +27 11 540 9260*