



Waanderweg 30a  
7812 HZ Emmen  
The Netherlands  
p +31 (0)591 633 200  
e info@wirelessvalue.nl  
i www.wirelessvalue.nl

## Technical Manual BU-GPRS-awenp

**Brand** : Wireless Value  
**Model** : BU-GPRS-awenp  
**Manufacturer name** : Wireless Value  
**Manufacturer address** : Waanderweg 30A, 7812HZ Emmen, The Netherlands

### BU-GPRS-awenp RF section

The Wireless Value BU-GPRS-awenp gathers data from all the paired Wireless Value sensors. For this part we use low power RF technology. The Base Station communicates via the RF network with up to 100 sensors.

For communication with the sensors the BU-GPRS-awenp uses the low power ISM frequency band. The frequencies and power is shown in table 1.

Table 1

Band name	Uplink frequencies (MHz)	Downlink frequencies (MHz)	Maximum Transmit Power	Modulation
Low power ISM	916.500	916.500	20dBm e.i.r.p. (Equivalent isotropic radiated power)	GFSK (Gaussian Frequency Shift Keying)

### BU-GPRS awenp GPRS section

The received sensordata is forwarded to the Wireless Value cloud software. Data integrity is secured by the on board buffer in case of connectivity issues.

Table 2 shows the relationship between the BU-GPRS-awenp and the factory installed WAN communication module. The FCC ID for the module is printed on the inside label of the BU-GPRS-awenp and may be useful for identifying the communication module.

Table 2

Product type	WAN communication module	FCC ID
<b>BU-GPRS-awenp</b>	<b>Telit GE910-Quad V3</b>	<b>R17GE910Q3</b>

### BU-GPRS-awenp with Telit GE910-quad V3

The BU-GPRS-awenp is available with a factory-installed Telit GE910-Quad V3. The Telit GE910-Quad V3 is a 4-band GPRS cellular module for use on 2G GPRS cellular networks. The BU-GPRS-awenp complies with the integration instructions provided by Telit in GE910-Quad V3 Series System product brief.

The frequency ranges and maximum transmission power are listed in the following tables.

The Telit GE910-Quad V3 cellular module complies with all applicable rules, regulations, and conventions of cellular communications defined by 3GPP standards organization. The Telit GE910-Quad V3 automatically selects the appropriate operational bands for the cellular carriers operating in the locale where the BU-GPRS-awenp is deployed.

At no time with the Telit GE910-Quad V3 transmit on unauthorized frequencies.

Table 3: Telit GE910-Quad V3 2G GSM Frequency Use and Power Ranges

Band name	Uplink frequencies (MHz)	Downlink frequencies (MHz)	Maximum Transmit Power
GSM 850 MHz	824-849	869-894	Class 4 (33dBm)
GSM 1900 MHz	1850-1910	1930-1990	Class 4 (33dBm)

Table 4: Telit GE910-Quad V3 Module approvals

Directive/Standard/Regulatory	Approval	ID Number
CE and R&TTED–European Conformity	V	
FCC Identification number	V	R17GE910Q3
Anatel (Brazil)	V	2519-13-2618
NBTC ( Thailand)	V	B69045-23-2421

#### Type Allocation Code as issued by GSMA

Telit GE910-Quad V3

IMEI: TAC: 355412 FAC: 11 SNR: 112626 CD: 2

## Wireless Value

Netherlands (Europe)

Customer and technical services are available for questions, problems, or feedback Monday through Friday, 9:00 to 18:00 Central European time.

Email: [support@wirelessvalue.nl](mailto:support@wirelessvalue.nl)  
[sales@wirelessvalue.nl](mailto:sales@wirelessvalue.nl)

Phone: +31 591 633200

Website: [www.wirelessvalue.nl](http://www.wirelessvalue.nl)

## References

Telit\_GE910-QUAD\_V3\_Product\_Brief

[https://www.telit.com/wp-content/uploads/2022/05/Telit\\_GE910-QUAD\\_V3\\_Product\\_Brief.pdf](https://www.telit.com/wp-content/uploads/2022/05/Telit_GE910-QUAD_V3_Product_Brief.pdf)

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