VAN WALT
monitoring your needs

Specifications

*vanwalt*DataSlave

ENCLOSURE	
Dimensions	125 x 125 x 80 mm + Antenna
Rating	Sealed to IP68 (BS EN 60529:1992)
Material	Diecast Aluminium, nylon coated
Temp Range of Seal	-60 oC to 240 oC
Enclosure wall & lid thickness	3 mm

ELECTRICAL
(Absolute Maximum Ratings)

Parameter	Min	Typ	Max	Unit
Operating Temperature	-30[1]	+25	+85	°C
Supply Voltage Sensor External Power Input	9	12	15	V
Supply Voltage Internal 2 x AA Batteries	1.8	3	3.6	V
Sensor Current Consumption Internal Power			75	mA
Sensor Current Consumption External Power			1	A
RF Output Power	1		100	mW

GENERAL CHARACTERISTICS

Parameter	Description	Min	Typ	Max	Unit
All operating conditions	Receive Current	-	15	20	mA
	Sleep Current	-	3.7	5	µA
	Channel Spacing	25	25	200	kHz
	Over Air Data rate	200	2400	100,000	bps
	Frequency Accuracy	-	-	±0.5	ppm
	RTC Accuracy	-	-	±5	ppm
	UART Baud Rate	100	9600	230,400	bps
Frequency 869.1 - 869.4 MHz	RF Output Power	-	-	25	mW
	Transmit Current	-	-	67	mA
Frequency 869.4 - 869.65 MHz	RF Output Power	-	-	100	mW
	Transmit Current	-	-	115	mA

VAN WALT
monitoring your needs

Specifications

*vanwalt*DataSlave

GENERAL CHARACTERISTICS CONTINUED					
Parameter	**Description**	**Min**	**Typ**	**Max**	**Unit**
Frequency 869.65 - 870.0 MHz	RF Output Power	-	-	25	mW
	Transmit Current	-	-	67	mA
Frequency 902 - 928 MHz	RF Output Power	-	-	25	mW
	Transmit Current	56	62	67	mA
Frequency 902 - 928 MHz	RF Output Power	-	-	100	mW
	Transmit Current	94	102	110	mA

[1] Operating temperature range will be determined by the battery. Alkaline AA batteries will limit the unit to -20 °C +54 °F

RECEIVER CHARACTERISTICS				
Parameter	**Min**	**Typ**	**Max**	**Unit**
Sensitivity at 200 bps for <1 X 10^{-3} BER	-	-124	-	dBm
Sensitivity at 2400 bps for <1 X 10^{-3} BER	-	-117	-	dBm
Sensitivity at 100,000 bps for <1 X 10^{-3} BER	-	-102	-	dBm

Under good line of sight conditions, it should achieve a range of 10km at its lowest data range. Range is most affected by the terrain and antenna height.

Operating Frequency Range			
Country	**Min**	**Max**	**Unit**
America	902.025	927.975	MHz
Australia	915.025	927.975	MHz
New Zealand	921	926	MHz
UK & Europe	869.1	869.975	MHz

SENSOR EXTRNAL POWER CONNECTOR BL5.08/2	
Pin	**Signal**
1	9-15V DC
2	oV

For external 12 V Battery when using higher power sensors.

Specifications

*vanwalt*DataSlave

Modbus/SDI-12 CONNECTOR BL5.08/6	
Pin	**Signal**
1	Switched +12V DC
2	Modbus D-
3	Modbus D+
4	SDI-12
5	oV
6	oV

The supply to the sensor will be switched on and off as required to save power.

PULSE COUNTER INPUT BL5.08/3	
Pin	**Signal**
1	Pulse Count Input
2	oV
3	oV

This is an optional connector for future expansion. It can count on positive or negative edges and detects a closure to ground.

MA209V2_04/04/2019_TD