

METEO GATEWAY

Parameters	Min	Typ	Max	Unit	Conditions
Electrical Characteristics					
Supply voltage	3.2	3.6	4.2	V	
Supply current		20 30 1.5 250		UA mA A mA	Power down mode one radio on (TX/RX) Peak current, Modem on Average current, Modem on
Power consumption	4.5	100	2000	mW	
Battery charger input voltage	5.2		15	V	
Battery charger current			0.5	A	
Primary battery voltage		3.6		V	
Primary battery capacity		14		Ah	
Secondary battery voltage		3.7		V	
Secondary battery capacity		2		Ah	
Sensors OnBoard					
Air temperature resolution		0.1		°C	
Air temperature range	-52		+52	°C	
Air humidity resolution		0.1		%	
Air humidity range	0		100	%	
Wind speed resolution		0.1		m/s	
Wind speed range	0		15	m/s	
Wind direction resolution		1		°	
Wind direction range	0		360	°	
Rain resolution		0.1		mm/h	
Device Characteristics					
EEPROM		4		KiB	
Digital I/O		86			
Timer/Counter		2 4		8 bit 16 bit	Separate prescaler, compare mode Prescale, compare, capture mode
ADC 10 bit		16			Optional differential input stage
Analog comparator		1			
Hardware input capture		4			
PWM channels		12			
UART		4			
SPI		1			
Byte oriented 2-wire interface		1			
JTAG		1			
Communication					
RF frequency	433.9		434.4	MHz	
RF modulation		GFSK			
RF transmission symbol rate		1200		Bd	
Data protection		Pseudo random bit scrambling			
Data error correction and integrity check		Interleaving FEC and 16bit CRC			
RF TX power			10	mW	
RF TX current		25		mA	
RF RX current		18		mA	

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RF RX sensitivity		-111		dBm	
Application server	TCP/IP over GPRS SMS over GSM				
Mechanical characteristics					
Temperature	-20 0		+65 +45	°C °C	Operational Operational with battery charging
Dimension	L=76	W=58	H=12	mm	GPRS module plugged
Other info					
Standard compliance / Certifications	CE				
Package	Environmental friendly				