



# Tor Venus



Model number	Venus 313	Venus 411	Venus 411 B	Venus 413
<b>Power supply</b>				
Supply voltage	11-30 V DC	14-90 V DC	14-90 V DC	14-90 V DC
Max supply voltage	30 V DC	90 V DC	90 V DC	90 V DC
Reverse polarity protection	0 to -30 V DC	0 to -90 V DC	0 to -30 V DC	0 to -90 V DC
Max operating current	<100 mA	<100 mA	<100 mA	<100 mA
Peak operating current	2A @network activities	2A @network activities	2A @network activities	2A @network activities
Backup battery	NA	NA	800 mAh , Li-Ion 3.7 V	NA
<b>Communication</b>				
Cellular	4G- LTE-FDD B1/B3/B5/B8 LTE-TDD B34/B38/B39/ B40/B41			
	2G- GSM 900 MHz/1800 MHz			
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS			
Network protocol	TCP/IP, Mqtt	TCP/IP, Mqtt	TCP/IP, Mqtt	TCP/IP, Mqtt
<b>Interfaces</b>				
CAN	NA	1	1	1
RS485	1 (RS485)	NA	NA	NA
Digital input	NA	2 (0-90V)	2 (0-90V)	2 (0-90V)
Digital output	NA	1 (500mA, 60V)	1 (500mA, 60V)	1 (500mA, 60V)
Analogue input	NA	NA	2 (0-90V) single wire	NA
Counter input (0-1000 Hz)	NA	NA	NA	NA
Hour meter	NA	NA	NA	NA
GNSS antenna	External	Internal	Internal	External
Cellular antenna	External GSM	Internal GSM	Internal GSM	External GSM
SIM	Micro	Micro	Micro	Micro
Memory	2000 strings @1 min			
<b>Bluetooth</b>				
Specification	BLE 4.2	BLE 4.2	BLE 4.2	BLE 4.2
<b>Additional features</b>				
Configuration / FOTA	Web configuration	Web configuration	Web configuration	Web configuration
Sensors	NA	NA	Accelerometer	NA
<b>Physical specification</b>				
Dimension	120 * 115 * 35 (L*W*H)			
Standard harness	4 Pin	4 Pin	4 Pin	12 Pin
<b>Operating environment</b>				
Operating temperature	-40 to +85 deg C			
Operating humidity	85 Rh	85 Rh	85 Rh	85 Rh
Vibration	2g, 10-150 Hertz	2g, 10-150 Hertz	2g, 10-150 Hertz	2g, 10-150 Hertz
Enclosure ingress protection (IP)	IP 65	IP 65	IP 65	IP 65

Model number	Venus 511	Venus 511 E 1	Venus 511 E 2	Venus 714
<b>Power supply</b>				
Supply voltage	12-30 V DC	12-30 V DC	12-30 V DC	12-30 V DC
Max supply voltage	30 V DC	30 V DC	30 V DC	30 V DC
Reverse polarity protection	0 to -30 V DC			
Max operating current	<100 mA	<100 mA	<100 mA	<100 mA
Peak operating current	2A @network activities	2A @network activities	2A @network activities	2A @network activities
Backup battery	800 mAH , Li-Ion 3.7 V	800 mAH , Li-Ion 3.7 V	800 mAH , Li-Ion 3.7 V	NA
<b>Communication</b>				
Cellular	4G- LTE-FDD B1/B3/B5/B8 LTE-TDD B34/B38/B39/ B40/B41			
	2G- GSM 900 MHz/1800 MHz			
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS			
Network protocol	TCP/IP, Mqtt	TCP/IP, Mqtt	TCP/IP, Mqtt	TCP/IP, Mqtt
<b>Interfaces</b>				
CAN	1	1	1	1
RS485	1	1	1	1
Digital input	2 (0-30V)	2 (0-30V)	2 (0-30V)	2 (0-30V)
Digital output	1 (500mA, 60V)	1 (500mA, 60V)	1 (500mA, 60V)	1 (500mA, 60V)
Analogue input	2 (0-30V) single wire			
Counter input (0-1000 Hz)	1	1	1	1
Hour meter	1	1	1	1
GNSS antenna	External	External	Internal	Internal
Cellular antenna	External GSM	External GSM	Internal GSM	Internal GSM
SIM	Micro	Micro	Micro	Micro
Memory	2000 strings @1 min	64 MB	64 MB	64 MB
<b>Bluetooth</b>				
Specification	BLE 4.2	BLE 4.2	BLE 4.2	BLE 4.2
<b>Additional features</b>				
Configuration / FOTA	Web configuration	Web configuration	Web configuration	Web configuration
Sensors	NA	NA	NA	NA
<b>Physical specification</b>				
Dimension	120 * 115 * 35 (L*W*H)			
Standard harness	12 Pin	12 Pin	12 Pin	8 Pin
<b>Operating environment</b>				
Operating temperature	-40 to +85 deg C			
Operating humidity	85 Rh	85 Rh	85 Rh	85 Rh
Vibration	2g, 10-150 Hertz	2g, 10-150 Hertz	2g, 10-150 Hertz	2g, 10-150 Hertz
Enclosure ingress protection (IP)	IP 65	IP 65	IP 65	IP 65