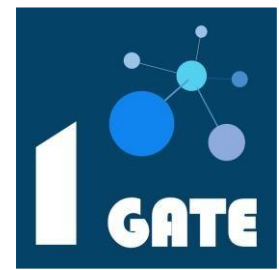


LoRaWan[®] Concentrator BOARDS

Build your own Gateway



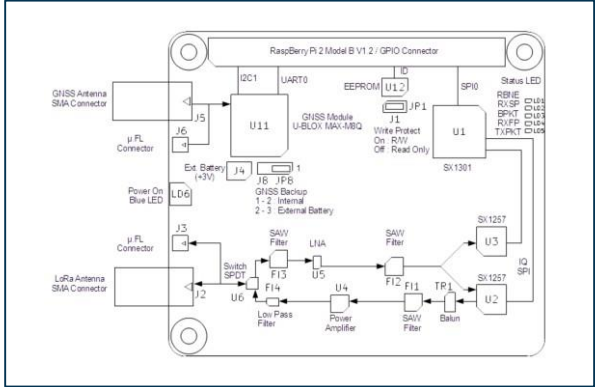
The LoRaWAN[®] Concentrator BOARDS from 1-Gate offers full LoRaWAN[®] connectivity based on Semtech's SX1301 base band and on a dual front end based on Semtech's SX1257. An embedded GPS module is proposed as an option.



- RPI HAT form factor
- 1x SX1301
- 2x SX1257
- 1 or 2 SMA-m Connectors
- Optional GPS/GNSS

	1-Gate LW BOARD	1-Gate LW BOARD GPS
RADIO	868MHz	
	Semtech SX1301 base band – Dual front end SX1257 (TX/RX)	
		GPS/GNSS
MECHANICAL	Raspberry Pi 3 Model B V1.2 GPIO Header	
	10x70mm	
	-20° / +70°C	
	1x SMA-f (LoRa)	
		1x SMA-f (GPS)

Block Diagram



Raspberry Pi 3 Model B V1.2 GPIO Header

Description	RPipin	BCM GPIO	WiringPi	Mode	Usage
ID_SD	27	GPIO0	30	bidir	IDEEPROM
ID_SC	28	GPIO1	31	bidir	IDEEPROM
SDA1	3	GPIO2	8	bidir	MAX-M8QDDC
SCL1	5	GPIO3	9	bidir	MAX-M8QDDC
GPIO4	7	GPIO4	7	input	MAX-M8QPPS
SPI0_CEO_N	24	GPIO8	10	output	SX1301SPI
SPI0_MISO	21	GPIO9	13	input	SX1301SPI
SPI0_MOSI	19	GPIO10	12	output	SX1301SPI
SPI0_CLK	23	GPIO11	14	output	SX1301SPI
TXD0	8	GPIO14	15	output	MAX-M8Q UART
RXD0	10	GPIO15	16	input	MAX-M8Q UART
GPIO18	12	GPIO18	1	output	MAX-M8Q Reset
GPIO25	22	GPIO25	6	output	SX1301 Reset
GPIO27	13	GPIO27	2	output	MAX-M8Q Interruption



LoRaWAN® Field TESTER

Product	Part Number	Description
1-GATE LW TESTER	1G-LFT-868-00-01	Field Tester for LoRaWAN networks (private or public)



LoRaWAN® Concentrator BOARDS

Product	Part Number	Description
1-GATE LW BOARD01	1G-LBD-BAS-868-02	LoRaWAN RPI HAT Board - SX1301/1257 – Multicanaux
1-GATE LW BOARD01 GPS	1G-LBD-BAS-868-01	LoRaWAN RPI HAT Board - SX1301/1257 – Multicanaux + GPS



LoRaWAN® COMPACT Indoor Gateway

Product	Part Number	Description
1-GATE LW COMPACT	1G-LWG-BAS-868-02-PACK	Gateway LoRaWan Indoor (with accessories)
1-GATE LW COMPACT GPS	1G-LWG-BAS-868-01-PACK	Gateway LoRaWan Indoor (with accessories) + GPS



LoRaWAN® COMPACT Indoor Gateway Network Server

Product	Part Number	Description
1-GATE LW COMPACT NS	1G-LWG-BAS-868-03-PACK	Gateway LoRaWan Indoor (with accessories) + Netw. S.
1-GATE LW COMPACT GNS	1G-LWG-BAS-868-04-PACK	Gateway LoRaWan Indoor (avec accessories) + Netw. S. + GPS



LoRaWAN® PREMIUM Outdoor Gateway

Product	Part Number	Description
1Gate LW PREMIUM	1G-LWG-OUT-868-01-PACK	Gateway LoRaWAN Outdoor (with accessories)



Accessories

Product	Part Number	Description
1G-PSU	1G-ACC-PSU-01	220V Power Supply for COMPACT
1G-DIN	1G-ACC-DIN-01	DinRail mounting for Gateway COMPACT
1G-CBL	1G-ACC-CBL-01	5m Cable - N-m / SMA-m



LoRa® 868MHz Antennas

Product	Part Number	Description
1G-ANT-868	1G-ANT-868-01	Rubber antenna- 868MHz - 2dBi gain - SMA-m
	1G-ANT-868-02	Outdoor 868MHz antenna - Gain de 4dBi - N-f - mounting kit included
	1G-ANT-868-03	Outdoor 868MHz antenna - 6dBi gain - H=98cm - N-f



GPS Antennas

Product	Part Number	Description
1G-ANT-GPS	1G-ANT-GPS-01	Indoor – Adhesive mount - 2,5m cable - SMA-m
	1G-ANT-GPS-02	Outdoor IP66 – Through hole mount - 3m cable - SMA-m
	1G-ANT-GPS-03	Outdoor IP66 – Magnetic mount - 3m cable - SMA-m

