

# LONG RANGE WIRELESS BRIDGES

SKU: WS433-BL

## LONG RANGE WIRELESS BRIDGES WS433-BL



WS433-BL-H1.PNG



WS433-BL is a range of Sub-Ghz wireless bridges to replace the RS485 cable or network. This wireless technology will save time, labor cost & cable cost as well. LOS Distance is up to 6000m at baud rate 38400. Optional integrated IoT gateway (iConnector) allows easily configure & diagnose remotely or monitoring / controls via any IoT Platform as well. The deployment of these wireless devices can be done in just 15 minutes!

- ✔ **ROBUST WIRELESS CONNECTION**  
Sub-Ghz technology from Texas Instruments delivers a Robust Wireless connection with AES-128 Security
- ✔ **6000M LOS DISTANCE**  
High performance engineered RF circuit to deliver the long range distance
- ✔ **ANY PROTOCOL! NOT ONLY MODBUS**  
Transparent connection allows the network nodes can talk in any protocol
- ✔ **SIMPLE CONFIGURATION**  
Wireless Bridges are easily configured by an offline tool or remotely by online tool (Globiots)
- ✔ **REMOTE CONFIGURATION & DIAGNOSTIC**  
With integrated IoT Gateway (iConnector), the configuration & diagnostic of entire network can be done remotely via Globiots platform
- ✔ **REMOTE MONITORING & CONTROLS**  
With integrated IoT Gateway (iConnector), the wireless nodes can be monitored and controlled remotely via Globiots or any IoT platform

## SIMPLY REPLACE RS485 CABLE



WS433-BL-H2.PNG

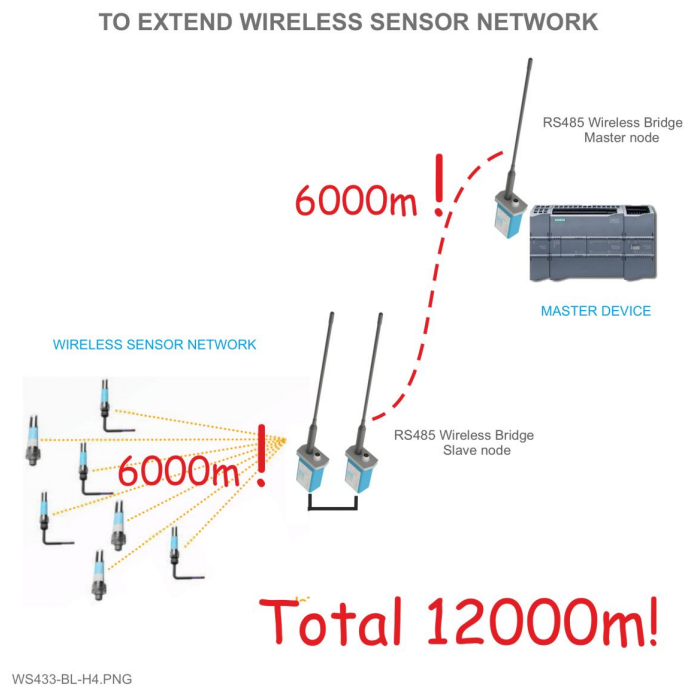
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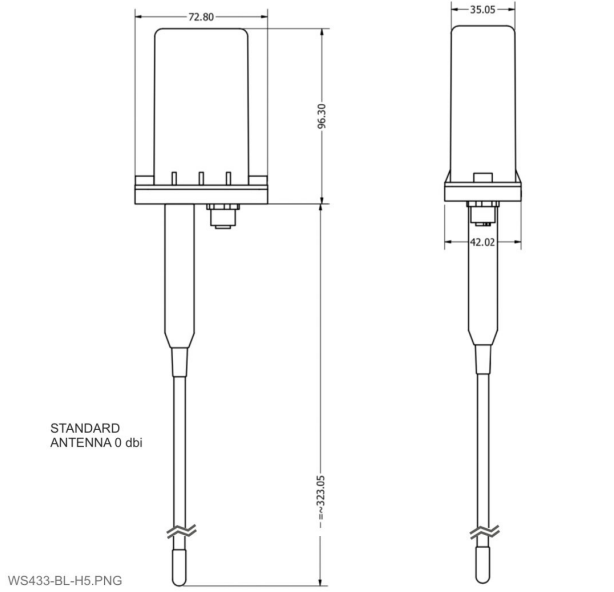
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**SPECIFICATION**

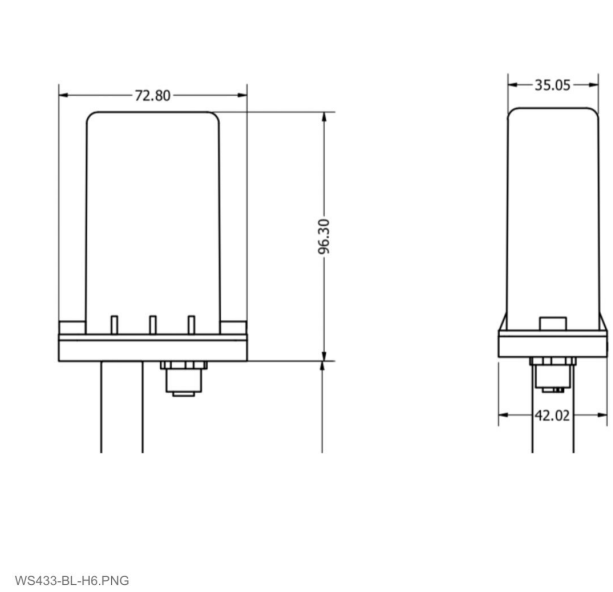
Communication	RS485, RS232 (optional)
Wireless data rate	50kbps (support baud rate 38400)
Transmission distance	LOS 6000m @ 50 kpbs (lowest Antenna height is 4m)
Antenna	Standard external antenna -1.1 dBi for slave node, 3.0 dBi for master node (option 6 & 9 dBi)
Power supply	7..48 Vdc @ 500mA max
Electrical connection	M12-female, 4-pin A-coding
RF frequency band	Free license ISM 433.92Mhz (for others 868, 915, 920Mhz, refer related datasheets)
Ready to comply	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)**
Vietnam Type Approval Certification	QCVN 73:2013/BTTTT, QCVN 96:2015/BTTTT (DAVITEQ B00122019)
Data encryption	AES-128
Ambient working temperature	-40oC..+85oC
Housing	Aluminum + Polycarbonate, IP67
Mounting	Wall mounting holes
Product dimensions	H106xW73xD42 (excluded antenna)
Net weight	190 grams
Packaging dimension	W160 x D150 x H100 mm
Gross weight	< 300 grams



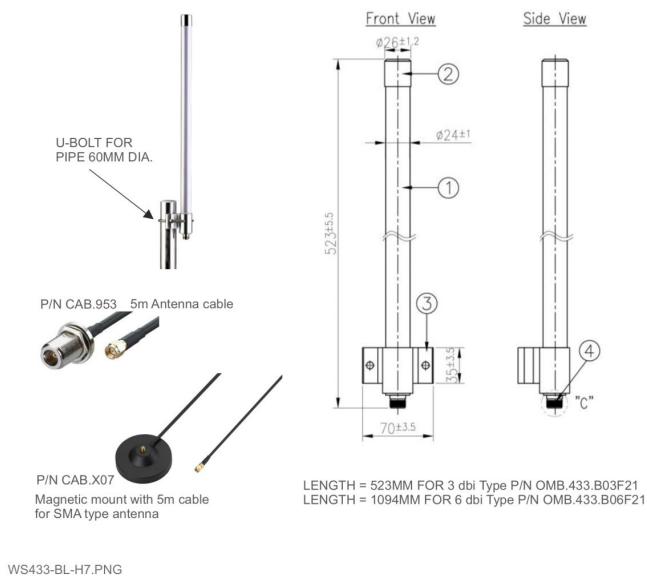
**DIMENSION DRAWING WIRELESS BRIDGES MASTER & SLAVE**



**DIMENSION DRAWING WIRELESS BRIDGES MASTER & SLAVE**



**HIGH GAIN OMNI ANTENNA 3DBI & 6DBI**



**USB-RS485 CONFIGURATION CABLE**



## ORDERING INFORMATION

ITEM CODES	DESCRIPTIONS
WS433-BL-RS485-M2	Long Range Wireless Bridge, Master, RS485, external antenna 0 dbi, M12-Female connector, 4-pin, coding A
WS433-BL-RS485-S2	Long Range Wireless Bridge, Slave, RS485, external antenna 0 dbi, M12-Female connector, 4-pin, coding A
WS433-BL-RS485-S1	Compact Wireless Bridge, Slave, RS485, internal antenna, M12-Female connector, 4-pin, coding A
STHC-ISG02DB-WS433-BL-RS485-M2	iConnector 3G Dual Band*, internal GSM antenna, RS485/ModbusRTU with built-in wireless co-ordinator, external antenna 0 dbi with M12-Female connector
STHC-ISG02-WS433-BL-RS485-M2	iConnector 3G Penta Band*, internal GSM antenna, RS485/ModbusRTU with built-in wireless co-ordinator, external antenna 0 dbi with M12-Female connector
STHC-ISGWF-WS433-BL-RS485-M2	iConnector WiFi*, internal WiFi antenna, RS485/ModbusRTU with built-in wireless co-ordinator, external antenna 0 dbi with M12-Female connector
<b>**ACCESSORIES FOR CELLULAR IOT GATEWAY (ICONNECTOR)**</b>	
SIMMOBI-3G	Mobifone DATA sim card, with sms (receive only), sending sms is in additional cost (for Vietnam only)
SIMMOBI-10K-01Y	12-month Data plan of Mobifone sim card, unlimited data, GPRS/EDGE/UMTS/HSPA (Vietnam only)
<b>**OPTIONAL ANTENNA &amp; ITS ACCESSORIES**</b>	
OMB.433.B03F21	433MHz 3dBi OMNI antenna, IP65, N-female, L=523mm, without Male-Male N-Adapter P/N 26-8009 and cable
OMB.433.B06F21	433MHz 6dBi OMNI antenna, IP65, N-female, L=1094mm, without Male-Male N-Adapter P/N 26-8009 and cable
CAB.953	Low lost antenna cable, 5m, N-female and SMA-male (use for N-type antenna)
CAB.X07	Magnetic mount with 5m cable with SMA-Female on the base and SMA-Male output (used to extend the 0 dbi antenna that comes with the bridge)
26-8009	Connector Adapt Plug-Plug N 50 Ohm, Male-to-Male N Type
<b>**OTHER ACCESSORIES**</b>	
RS485-FM12-USB-1	RS485/USB multi-purpose Configuration cable** with connector m12 male, female and flying leads, with Power adapter 12VDC/2.0A
2M-MM12CAB4x0.25	M12 4pin Male assembly connector with Soldering terminals and coding A and Control Cable Cu/PVC/OS/PVC 4x0.25mm <sup>2</sup> , L=2m, Rohs, Shield 80%
2M-FM12CAB4x0.25	M12 4pin Female assembly connector with Soldering terminals and coding A and Control Cable Cu/PVC/OS/PVC 4x0.25mm <sup>2</sup> , L=2m, Rohs, Shield 80%
5M-MM12CAB4x0.25	M12 4pin Male assembly connector with Soldering terminals and coding A and Control Cable Cu/PVC/OS/PVC 4x0.25mm <sup>2</sup> , L=5m, Rohs, Shield 80%
5M-FM12CAB4x0.25	M12 4pin Female assembly connector with Soldering terminals and coding A and Control Cable Cu/PVC/OS/PVC 4x0.25mm <sup>2</sup> , L=5m, Rohs, Shield 80%
10M-MM12CAB4x0.25	M12 4pin Male assembly connector with Soldering terminals and coding A and Control Cable Cu/PVC/OS/PVC 4x0.25mm <sup>2</sup> , L=10m, Rohs, Shield 80%
10M-FM12CAB4x0.25	M12 4pin Female assembly connector with Soldering terminals and coding A and Control Cable Cu/PVC/OS/PVC 4x0.25mm <sup>2</sup> , L=10m, Rohs, Shield 80%
Notes	* Refer datasheet of iConnector STHC to find more information
	** Purchase M12 male or female cable to power and RS485 connecting for wireless co-ordinator
	*** Purchase configuration cable RS485-FM12-USB-1 for off-line configuration of iConnector

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