

Sub-Ghz Ex d Wireless Bridges



SKU: WS433-BLEX

ZONE 1/2 EXPLOSION-PROOF WIRELESS BRIDGES WS433-BLEX



WS433-BLEX-H1.PNG

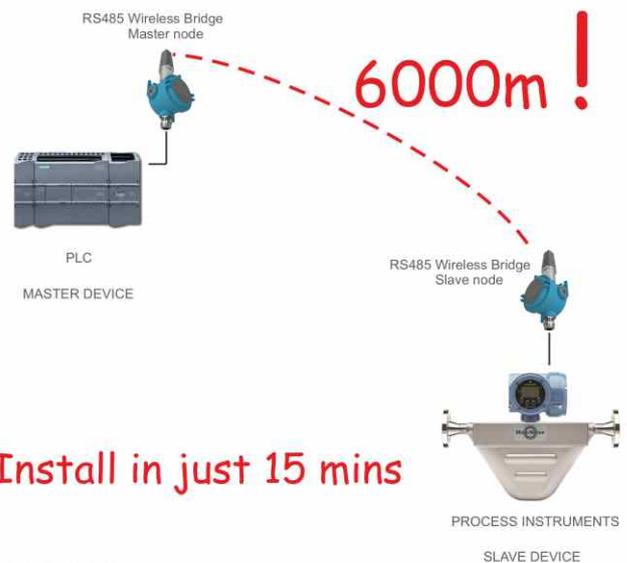


WS433-BLEX is a range of Sub-Ghz wireless bridges to replace the RS485 cable or network. It has Ex d approval for installation in Zone 1, Zone 2 or Safe Zone. LOS Distance is up to 6000m at baud rate 38400. This wireless technology will save time, labor cost & cable cost as well.

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-BLEX-H2.PNG

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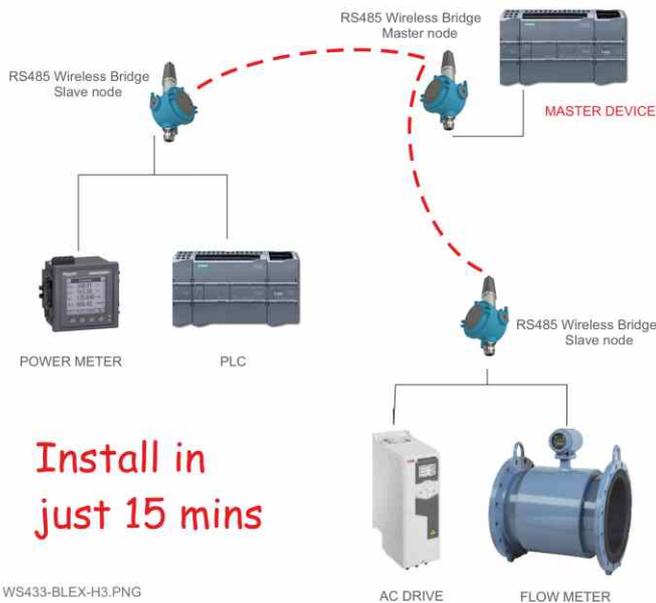
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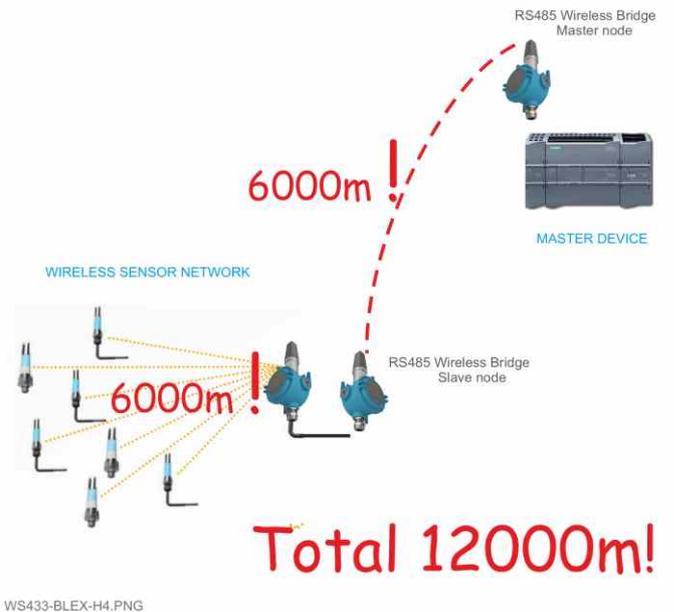
SPECIFICATION

Communication	RS485, RS232 (optional)
Wireless Data rate	50 kbps (support 38400 Baud rate of serial communication)
Transmission distance	6000m LOS @ 50 kbps (lowest antenna height is 4m)
Antenna	Standard external -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	01 x M12 conduit (cable gland is not included)
RF frequency band	Free license ISM Band 433.92Mhz (for 868, 915 & 920 Mhz, 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)
Certification number	IMQ 14 ATEX 005 X and TÜV CY 18 ATEX 0206158 X
Marking	ATEX II 2G Ex db IIC T5/T6 Gb and ATEX II 2D Ex tb IIIC T100/T85°C Db
Directive	ATEX 2014/34/EU
Standards	IEC-EN60079-0 IEC-EN60079-1 IEC-EN60079-31
Applicable zones	Zone 1 - 21 (gas) and Zone 2 - 22 (dust)
Data encryption	AES-128
Ambient working temperature	-40oC..+85oC
Housing	Cast aluminum, powder coated, IP66
Net weight	1.3 kgs (without antenna)

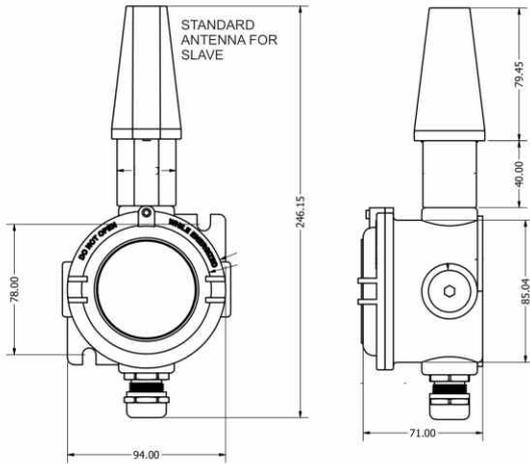
A WIRELESS RS485 NETWORK



TO EXTEND WIRELESS SENSOR NETWORK



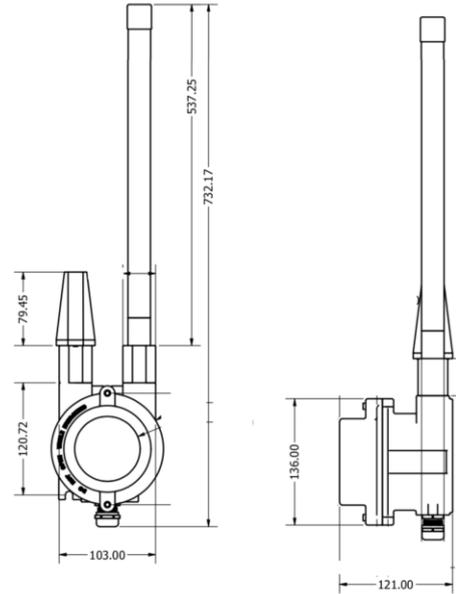
DIMENSION DRAWING WIRELESS BRIDGES MASTER & SLAVE



WIRELESS BRIDGE SLAVE WITH -1.1 DBI ANTENNA
 WIRELESS BRIDGE MASTER HAS THE SAME DIMENSION, EXCEPT THE ANTENNA LENGTH IS 523MM

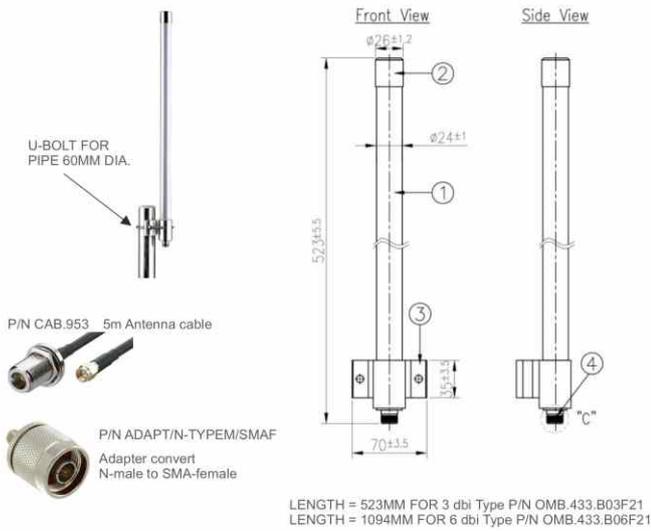
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DIMENSION DRAWING WIRELESS BRIDGES MASTER WITH INTEGRATED IOT GATEWAY (iConnector)



WS433-BLEX-H6.PNG

HIGH GAIN OMNI ANTENNA 3DBI & 6DBI



WS433-BLEX-H7.PNG

USB-RS485 CONFIGURATION CABLE



WS433-BLEX-H8.PNG

ORDERING INFORMATION

WS433-BLEX-RS485-M3	Wireless bridge, Ex d approved, Master, RS485, external antenna 3dbi with 5m RF cable
WS433-BLEX-RS485-S2	Wireless bridge, Ex d approved, Slave, RS485, external integrated antenna -1.1dbi
STHC-X-ISG02DB-WS433-BLEX-RS485-M3	iConnector 3G Dual Band*, Ex d, external GSM antenna 2.3 dbi N-male, RS485/ModbusRTU with built-in wireless bridge, master RS485, external antenna 3dbi with 5m RF cable
STHC-X-ISG02-WS433-BLEX-RS485-M3	iConnector 3G Penta Band*, Ex d, external GSM antenna 2.3 dbi N-male, RS485/ModbusRTU with built-in wireless bridge, master RS485, external antenna 3dbi with 5m RF cable
STHC-X-ISGWF-WS433-BLEX-RS485-M3	iConnector WiFi*, Ex d, external WiFi antenna 4.48 dbi N-male, RS485/ModbusRTU with built-in wireless bridge, master RS485, external antenna 3dbi with 5m RF cable

ACCESSORIES FOR CELLULAR IOT GATEWAY (ICONNECTOR)

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)

OPTIONAL ANTENNA & ITS ACCESSORIES

OMB.433.B03F21	433MHz 3dBi OMNI antenna, IP65, N-female, L=523mm, c/w Male-Male N-Adapter P/N 26-8009
OMB.433.B06F21	433MHz 6dBi OMNI antenna, IP65, N-female, L=523mm, c/w Male-Male N-Adapter P/N 26-8009
CAB.953	Low loss antenna cable, 5m, N-female and SMA-male
ADAPT/N-TYPEM/SMAF	N-male to SMA-Female adapter

OTHER ACCESSORIES

RS485-FM12-USB-1	RS485/USB multi-purpose Configuration cable** with connector m12 male, female and flying leads, with Power adapter 12VDC/2.0A
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NOTES

	* Refer datasheet of iConnector STHC to find more information.
	** Order RS485-FM12-USB-1 to configure wireless bridge and iConnector