

Long Range Wireless Co-Ordinator



Smart Agriculture, Smart Building, Smart City, Smart Energy, Smart Facility, Smart Factory, Smart Farm, Smart Healthcare, Smart Retail, Smart Transportation, Smart Utilities

SKU: WS433-CL

LONG RANGE WIRELESS COORDINATOR WS433-CL



WS433-CL-H1.PNG



☒ Safe Zone

☐ Hazardous Zones

WS433-CL is a wireless co-ordinator in a wireless sensor network, a high-performance type. It is able to configure the parameters for all end nodes in the network. By the Sub-GHz technology from Texas Instruments, it is easy to establish multiple networks in same area without interference or channel conflict. One co-ordinator can handle maximum of 40 end nodes in its network. LOS transmission distance up to 6000m. The WS433-CL also has the option of adding an IoT Gateway built-in to facilitate remote configuration and diagnostics, as well as remote monitoring and control via any IIoT platform. The installation and configuration is very simple. Setting up a wireless sensor network has never been this easy.

Applications

Automatic Ventilation System, Facility Monitoring, Indoor Air Quality Monitor, Warehouse Monitoring, Temperature Monitoring

Notes For Applications

- ☒ **Reliable & Secured Wireless Connection**
Sub-GHz technology from Texas Instruments allows reliable wireless connection and secured data by AES-128
- ☒ **6000M LOS DISTANCE**
High performance RF design combined with high gain external antenna
- ☒ **Powerful Management Function**
Allows to configure, manage & diagnose each sensor node in the network to ensure the most reliable operation of the wireless system
- ☒ **Simple Configuration**
Wireless Bridges are easily configured by an offline tool or remotely by online tool (Globiots)

LONG RANGE WIRELESS COORDINATOR WS433-CL-06



WS433-CL-H2.PNG



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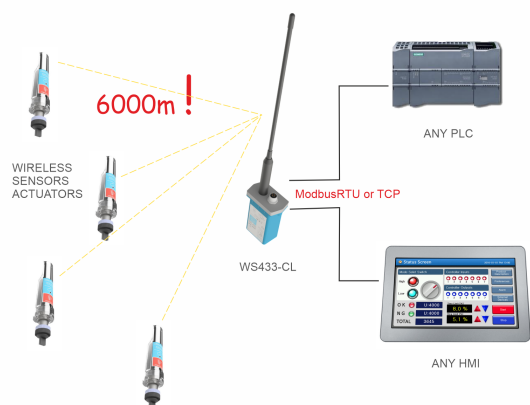
Updated date: Sep-04-2024

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Specification

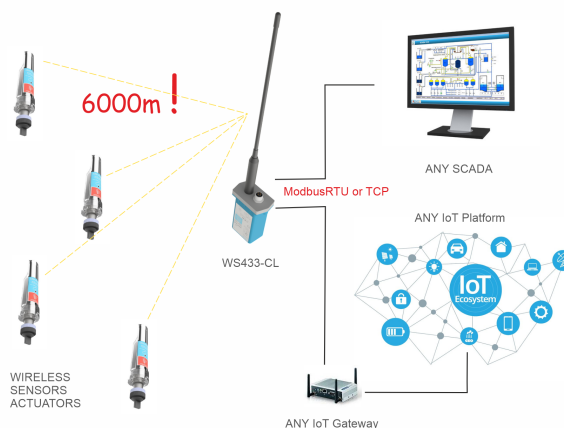
Communication	RS485
Data speed	Up to 50kbps
Tranmission distance	LOS 6000m @ 50kpbs (antenna height is 4m minimum)
Antenna	Standard external antenna 0 dbi, option 3dbi, 6dbi, 9dbi
Power supply	7~48VDC @ 500mA max
Electrical connector	M12-female, 4-pin A-coding
RF frequency band	Free license ISM 433.92MHz (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)
Security Standard	AES-128
Operating temperature	-40~85℃
Housing	Aluminum + Polycarbonate, IP67
Included accessories	Mounting bracket for wall mount
Product dimension	H106 x W73 x D42 mm (excluded antenna)
Net weight	190g
Box dimension	W160 x D150 x H100 mm
Gross weight	< 300g

CONNECT WIRELESS SENSORS TO any PLC or HMI



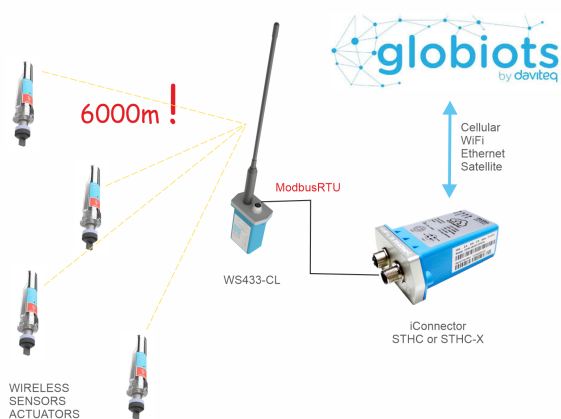
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CONNECT WIRELESS SENSORS TO any SCADA or IoT Platform



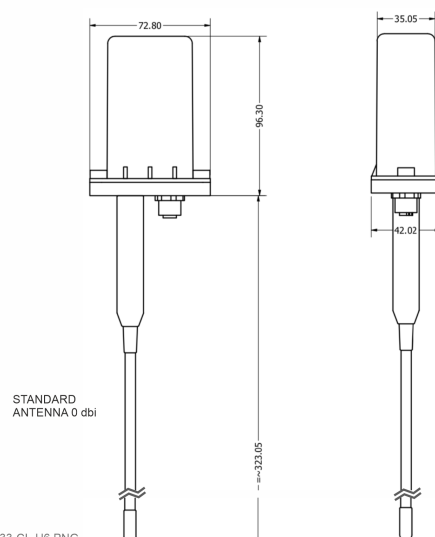
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CONNECT WIRELESS SENSORS TO GLOBIOTS Platform



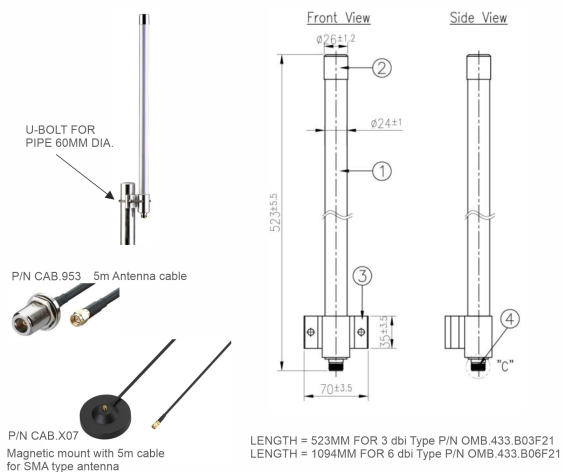
WS433-CL-H5.PNG

DIMENSION DRAWING WIRELESS CO-ORDINATOR WS433-CL



WS433-CL-H6.PNG

HIGH GAIN OMNI ANTENNA 3DBI & 6DBI



WS433-CL-H7.PNG

USB-RS485 CONFIGURATION CABLE



WS433-CL-H8.PNG

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Ordering Information

ITEM CODES	DESCRIPTIONS
WS433-CL-04	Wireless Sensor Co-ordinator with external antenna 0 dbi, M12-Female connector, 4-pin, coding A, RS485 ModbusRTU
WS433-CL-06	Wireless Sensor Co-ordinator with internal antenna, M12-Male connector, 4-pin, coding A, RS485 ModbusRTU
STHC-ISG02DB-WS433-CL-04	iConnector 3G Dual Band*, internal GSM antenna, RS485/ ModbusRTU with built-in wireless co-ordinator, external antenna 0 dbi with M12-Male connector
STHC-ISG02-WS433-CL-04	iConnector 3G Penta Band*, internal GSM antenna, RS485/ ModbusRTU with built-in wireless co-ordinator, external antenna 0 dbi with M12-Male connector
STHC-ISGWF-WS433-CL-04	iConnector WiFi*, internal WiFi antenna, RS485/ ModbusRTU with built-in wireless co-ordinator, external antenna 0 dbi with M12-Male connector
ACCESSORIES FOR CELLULAR IOT GATEWAY (ICONNECTOR)	undefined
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	undefined
OMB.433.B03F21	433MHz 3dBi OMNI antenna, IP65, N-female, L=523mm, c/w Male-Male N-Adapter P/N 26-8009 (excluded cable)
OMB.433.B06F21	433MHz 6dBi OMNI antenna, IP65, N-female, L=1094mm, c/w Male-Male N-Adapter P/N 26-8009 (excluded 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)
OTHER ACCESSORIES	undefined
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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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 ² , 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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