

# Sensor Hub series

Sensing always and everywhere



DSH100 sensor hub device series is connection point and interface between multiple sensors or actuators and host devices. This family helps to acquire and integrate data from different devices and process them to be compatible to host side. On the host side different interfaces are supported: RS-232/485, USB, Ethernet, Wi-Fi and Bluetooth.

DSH100 may be used as simple interface between computer and sensors or may be a part of large scale system performing a role of bridge to IoT Gateways.



# DECODE

# DSH100 series

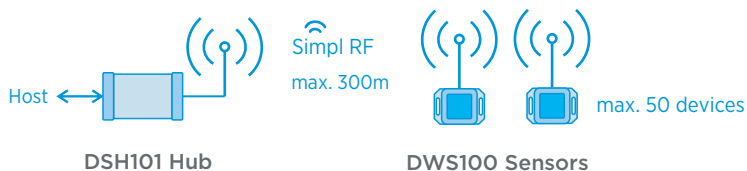
## Models and variants

There are several models and variants of sensor hub devices according to sensor and host interface.

Sensor interface	Base model	Host interface Option				
		USB	RS232/485	Ethernet	WiFi	Bluetooth
SimplRF	DSH101	-USB	-SER	-ETH	-WLN	-BT
WM-Bus T1/T2	DSH102					
SimplRF long range	DSH103					
M-Bus master	DSH104					
RS485 & 5V power	DSH105					
Digital I/O 4DI/4DO	DSH106					
Analog I/O 8AI	DSH107					

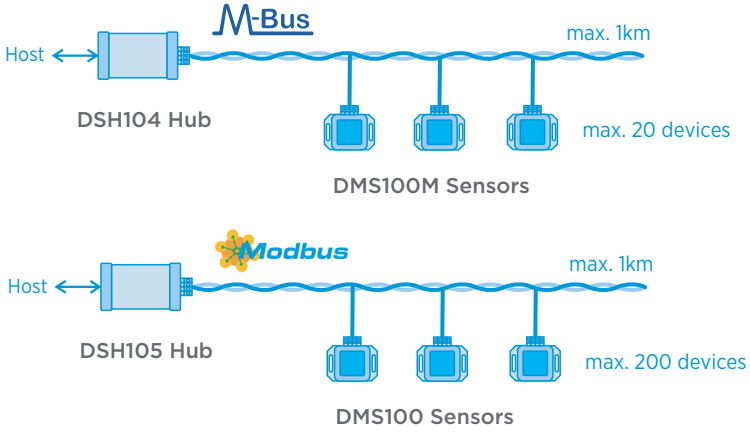
## Wireless sensor hubs

Wireless sensor hubs act as access point for DWS100 and DWS100M wireless sensors but may be used with any devices which is compatible with SimplRF or WM-Bus protocol. According to selected protocol, different radio ranges may be obtained with different number of sensing nodes. In case of WM-Bus protocol number of nodes is limited only by interval between radio transmission.



## Wired sensor hubs

Wired sensor hubs is protocol converters for DMS100 and DMS100M wired sensor and also for other devices using Modbus or M-Bus protocol.



## Host interfaces

### USB (Option - USB)

This is the most common interface found on desktop, laptop, tablets and mobile phones. Most IoT gateways and embedded computers may use this interface to connect to sensors and actuators.



#### Specification

Power supply	from USB port
Interface	USB 1.1 and 2.0 standard
Compatibility	Windows and Linux OS
Connection	USB type B connector
LED indication	On, Rx, Tx
Housing	plastic, 90x43x20mm

### RS-232/485 (Option - SER)

Although this interface is obsolete on desktop computers, this is default connection for many PLCs, HMIs, regulators and similar automation equipment.

#### Specification

Power supply	8 - 30VDC
Interface	RS-232/485
Speed	max. 115200bps
Connection	DB-9 Female
Housing	aluminium, 88x58x28mm



## Ethernet (Option - ETH)

This interface option bridges wireless and wired smart sensors and IP connectivity. Several modes may be configured using embedded web page. For Modbus sensors special ModbusRTU to ModbusTCP gateway may be enabled. Power Over Ethernet may be ordered as an option.



### Specification

Interface	IEEE 802.3, 10/100 Base-T
IP protocols	UDP and TCP/IP, Server/Client
Configure	Web page
Modbus support	ModbusTCP gateway
Power supply	8 - 30VDC
PoE	On request
Housing	aluminium, 88x58x28mm

## Wi-Fi (Option - WLN)

This is also IP connectivity and is the common interface for connection smart sensors to IP host devices.

### Specification

Standard	802.11 b/g/n
Network type	Station/AP mode
Configure	Web page
Antenna	SMA connector
Power supply	8 - 30VDC
Housing	aluminium, 88x58x28mm



## Bluetooth (Option - BT)

Most common interface on laptop, tablets and mobile phones. Very useful for testing and installation phases.



### Specification

Power supply	Rechargeable battery
Charging	Micro USB
Bluetooth	Version 2.1+EDR
Profile	SPP
Range	max. 20m
LED indication	On, Rx, Tx
Housing	plastic, 90x43x20mm