6A07/6A08/6A09 Type - WiSenMeshWAN® 1/4/8-Channel Vibrating Wire Interface Node

Basics	6A07: 1-Channel	6A08: 4-Channel	6A09: 8-Channel
Battery Power	Qty. x 1 (3.6V Lithium primary D-Cell ER34615)	Qty. x 2 (3.6V Lithium primary D-Cell ER34615)	
Accuracy Stop Voltage	2.1VDC		
Mesh Stop Voltage	2.1VDC		
Battery Connection	Standard Aluminium Battery Holder		
Working Current (DC)	Max. 30mA (Typ. 15mA)	Max. 32mA (Typ. 27mA)	Max. 34mA (Typ. 30mA)
Local Storage	Min. 1500 Messages during Meshing at Mesh3.0 Protocol		
Dimension (L x W x H)	100 x 100 x 60mm	180 x 140 x 60mm	
Weight	0.60kg	1.20kg	1.45kg
External Sensor Size and Weight	Depending on the specific VW sensor connected (external cable length ≤ 1.1km)		
Cable Gland	Qty. 1 x EMC-CMA14 for external VW sensor connection (through cable diameter, 4-8mm)	Qty. 4 x EMC-CMA14 for external VW sensor connections (through cable diameter, 4-8mm)	Qty. 8 x EMC-CMA14 for external VW sensor connections (through cable diameter, 4-8mm)
Wire Connection	Spring type wiring terminal		
Externally Connected VW Sensor			
Sensor Type	Vibrating Wire Typed		
No. of Inputs	1 Channel	4 Channels	8 Channels
Sensor Connection	VW Type of 5 wires: VW+, VW-, T+, T-, GND. Note: Temperature wires (or a 3kΩ resistor) must be connected to the T+ & T- terminals so VW node can work properly; Ground wire between a node and a sensor must be connected.		
Parameter	Resonant Frequency (Hz)		
Range	400 to 6000Hz		
Accuracy	0.015% at Any Reading		
Sensitivity	0.002Hz@400Hz or 0.05Hz@6000Hz		
External Thermistor Sensor			
Parameter	Thermistor Resistor of 3kΩ @25°C		
Range	0.052kΩ to 113.096 kΩ		
Accuracy	0.12kΩ or 2°C		
Standard System Parameter			
Temperature	Range:-40 to 85°C, Accuracy: ±1°C, typical 0.5°C; Resolution: 0.1°C		
Voltage	Accuracy: ±0.1V		
WSN Interface			
Mesh Wireless Interface	WiSenMeshWAN® Protocol		
Industrial Standard			
Casing and Painting Materials	Aluminium-Alloy Die Castings 12 (Epoxy Polyester Powder Coating)		
IP Rating	≥ IP66		
Operating Temperature	-40 to 85°C		
Fire Proof	Approved		

Wisen Innovation Ltd, Osprey House, Alington Road, Little Barford, St Neots, Bedfordshire, PE19 6WL

Applications

WiSenMeshWAN® VW interface node is Compatible with all different brands & types of high quality Vibrating Wire sensors, therefore it can be applied in all different related monitoring projects.

Examples of VW sensors: Strain Gauge; Displacement Transducers; Piezometers; Settlement Sensors; Pressure Cells; Load Cells. Suggested VW sensor supplier: http://www.soilinstrument.com/

Note: For the conversion from a "Hz reading" to an actual reading with meaningful unit (e.g., water pressure kPa, strain u ε , displacement in mm), please read "Virtual Node Creation Procedures on Wisen Web Platform" in the Appendix.

Installation Guidance

Figure. 1-Channel VW Interface Node Product Photos.

Figure. 4-Channel VW Interface Node Product Photos.
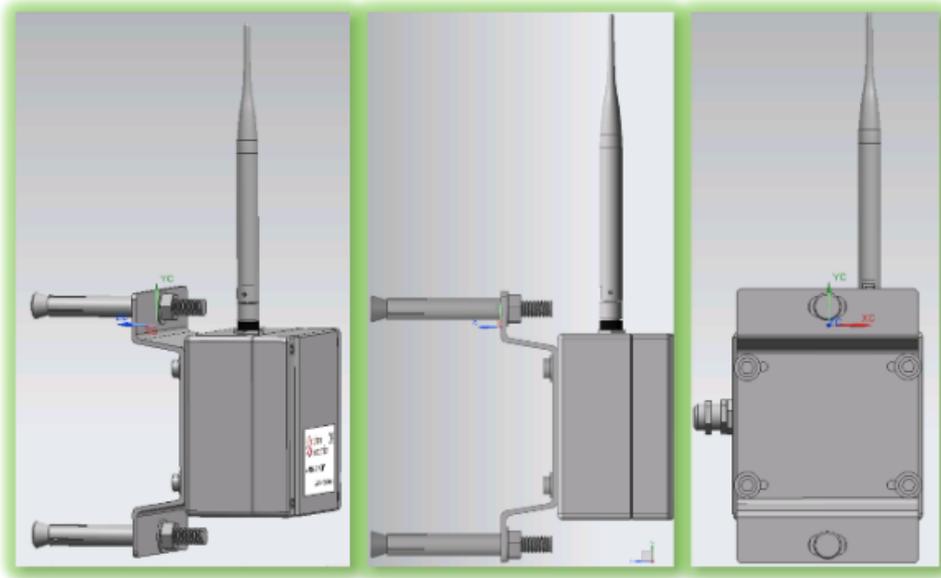
Figure. 8-Channel VW Interface Node Product Photos.

Figure. 1-Channel VW Interface Node with fixing bracket.

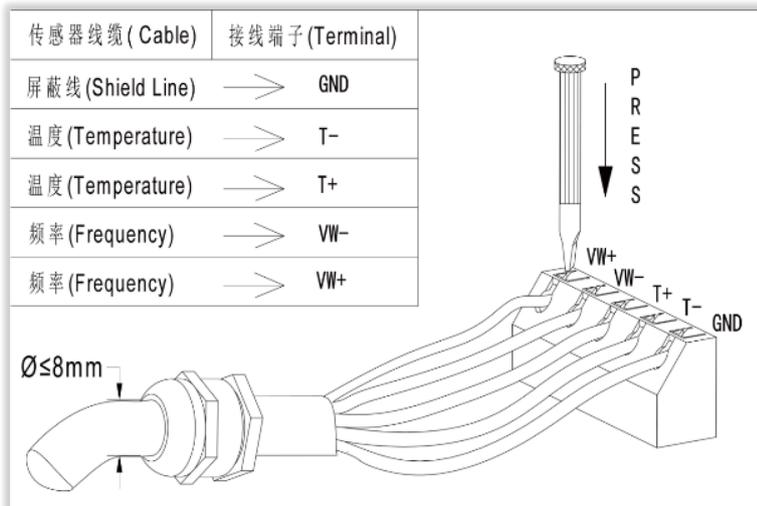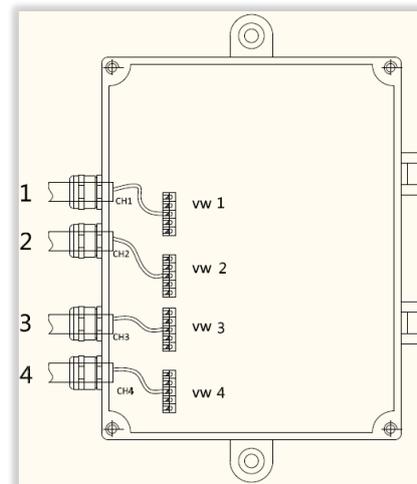| 传感器线缆 (Cable)	接线端子(Terminal)
屏蔽线 (Shield Line) ⟶	GND
温度 (Temperature) ⟶	T−
温度 (Temperature) ⟶	T+
频率 (Frequency) ⟶	VW−
频率 (Frequency) ⟶	VW+

Figure. VW Sensor Connections (VW+, VW-, T+, T-, GND).   Figure. 4-Channel VW relate Sensor Connection.