ortana

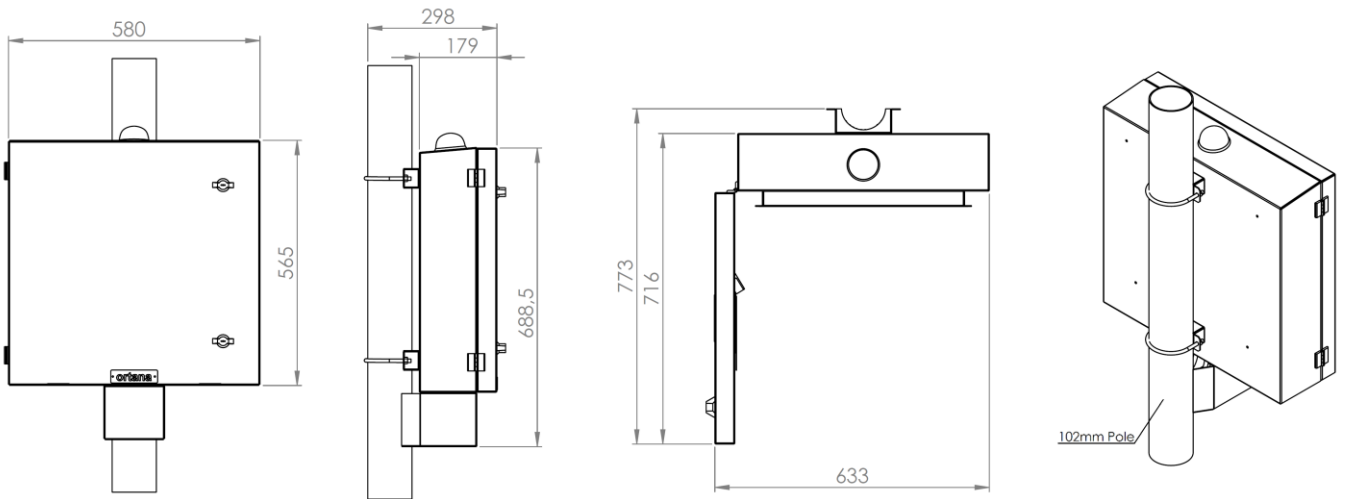# Meteorology Station Control Cabinet METEOS 910

ORT/SD-METEOS 910

Ortana Meteorology Station Control Cabinet is designed to used in outside environmental conditions. Control Cabinet includes Control and Storage Unit, Power Supplies, GSM-GPRS Antennas, Surge Arrestors for Data & Power and Switch Gear for METEOS 101 Integrated Meteorology Sensor, METEOS 151 Visibility Sensor, METEOS 201 Passive Road Surface Sensor or METEOS 251 Overhead Road Surface Sensor.

- Especially built for Meteorology Systems

- High Mechanical Protection

- Maintenance Free Aluminum Housing

- Simple Installation

- Ideal Housing for Electric and Electronic Units

- Ideal for Harsh Environmental Conditions

- IP66 Isolation Class

- Wide Operating Temperature Range (-40ºC to +80ºC)

- Minimum 15 years life time including all equipment (Low Maintenance Requirement)

- Automatically functioning Heater Fans for Cold Environmental Conditions (Internal Temperature Sensor)

- Internal GPS Sensor (Optional)

- Internal GSM/GPRS-HSPA (Optional)

- Internal Power Backup Unit for Data Losses

- Both Proprietary (TCP/IP, Modbus, Profibus) and Open (NTCIP) Communication Protocols

- WEB Based User Interface
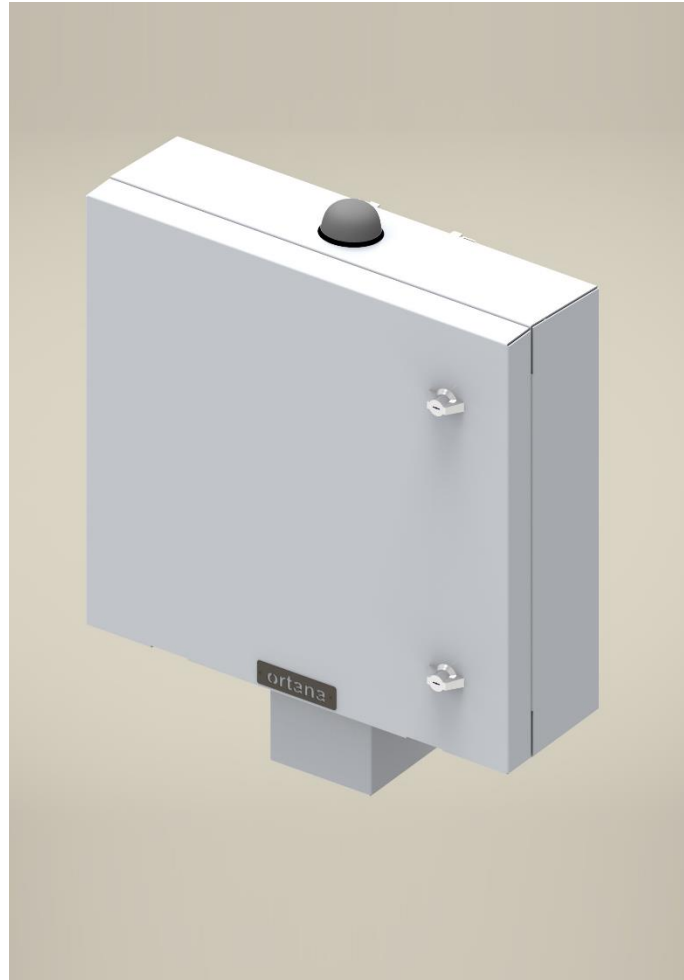
Mechanical Specifications

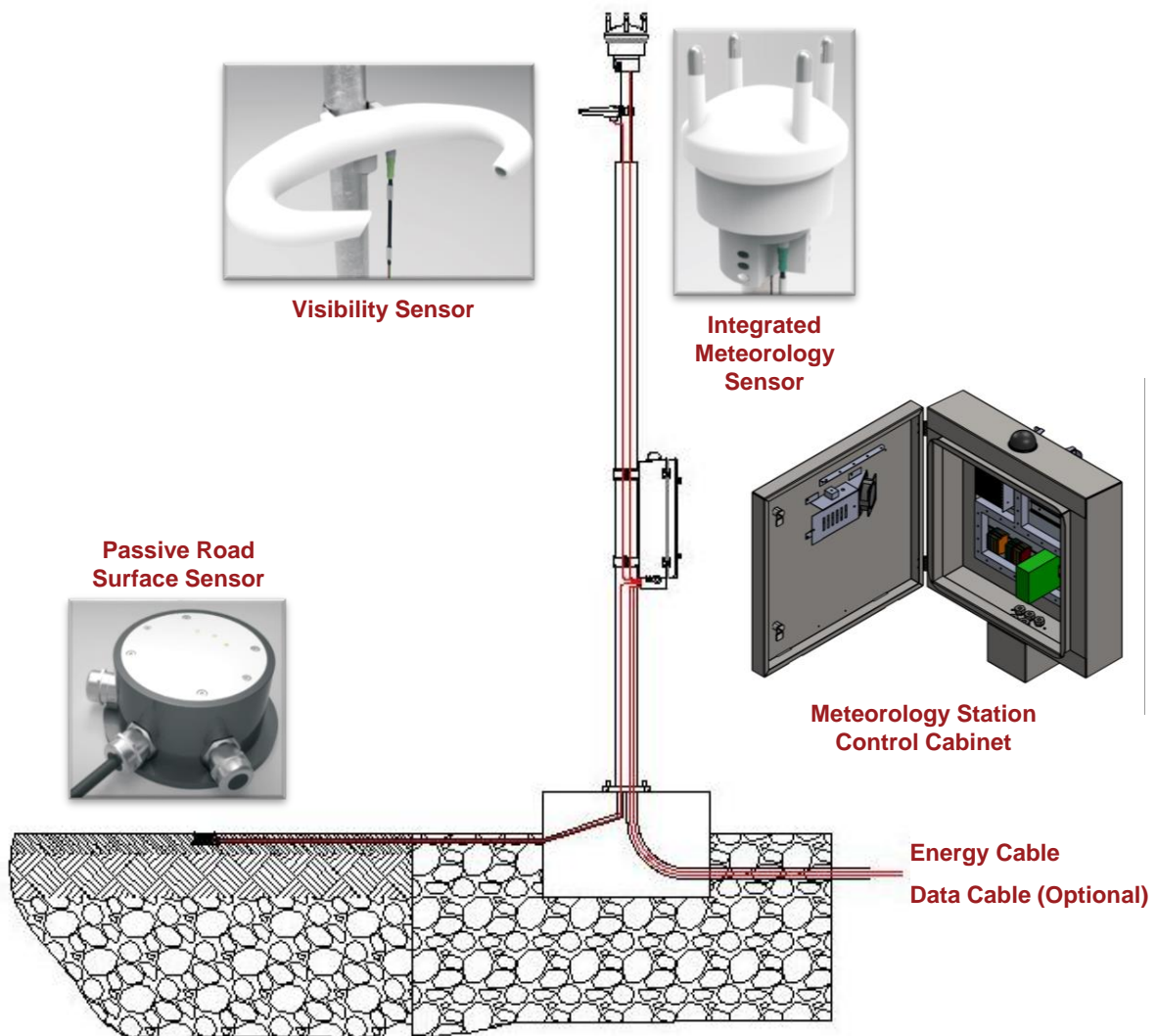|	
Mechanical Dimension (Cabinet)	: 580 (w) x 564 (h) x 179 (d) mm
Housing Material	: Aluminum
Housing Paint	: RAL 7035
Cable Glands	: 4x PG13,5 (Sensors and Data) 1xPG16 (Power Input)
Weight	: Approx. 14 kg (Connection Apparatus Incl.)
Mounting Pole Diameter *	: 102 mm

External View

(*) Mounting Pole is not supplied with Meteorology Station Control Cabinet, Mounting Pole must be ordered separately.

Data Logger Electronics Specifications

Control Unit	: 32 Bit Microcontoller, RTC Module
Electronic Unit	: Data Control & Storage Unit, SMPS, Heater Fan, EMC Filter, Parafodur, Surge Protectors, 230VAC Outlet Socket
Storage Memory	: 8 GB SD Card (Optional)
Interfaces	: Ethernet (RJ45) (Parameters are controlled/managed via WEB-GUI) Isolated RS-485 Half Duplex (up to 115200bps) (for Sensors)
Supported Protocols	: NTCIP, TCP/IP, Modbus, Profibus

Visibility Sensor

Integrated Meteorology Sensor

Passive Road Surface Sensor

Meteorology Station Control Cabinet

Energy Cable

Data Cable (Optional)

Electrical Specifications

Operating Temperature & Humidity	: - 40ºC to +80ºC, %0-100 Relative Humidity
Power Demand	: 230 VAC ±10%
Power Consumption	: Max. 200W (Sensors* and Internal Heater is connected)

*METEOS 101 Integrated Meteorology Sensor, METEOS 151 Visibility Sensor, METEOS 201 Passive Road Surface Sensor is powered from the control cabinet, max. power consumption of the sensors is taken into account for calculating the max. cabinet power consumption.

Standards

Ortana Meteorology Station Control Cabinet meet and exceed all international standards for electrical, mechanical and resistance requirements. All Ortana Meteorology Station Control Cabinets are manufactured according to ISO9001, ISO14001, ISO27001 Standards.

- NTCIP
- AASHTO and AWS certification criteria
- IEC60950-1, HD.384.4, HD.638, NEN1010 safety standards
- IEC60529 for Housing Protection

Certificates

- Vibration Test in accordance with EN 60068-2-64
- Corrosion Test in accordance with EN ISO 9227
- Housing Protection in accordance with EN 60529
- Temperature Test

  Cold EN60068-2-1

  Dry Heat IEC 60068-2-2

  Damp Heat Cycling EN 60068-2-30

  Solar Radiation EN 60068-2-5

  Change of Temperature IEC 60068-2-14

- Electrical Safety according to EC 60950-1, HD384, HD638
- EMC Testing

  EN 55022 Emission

  EN 61000-3-2 Harmonic current emissions

  EN 61000-3-3 Limitation of voltage fluctuations

  EN 50293 Product group immunity standard

    EN 61000-4-2 Electrostatic discharge (ESD) immunity

    EN61000-4-3 Radiated Electro-Magnetic field immunity

    ENV 50204 Digital radio telephones immunity

    EN 61000-4-4 Electrical fast transient (EFT) immunity

    EN 61000-4-5 Surge transient immunity

    EN 61000-4-6 Conducted Radio-Frequency disturbances immunity

    EN 610000-4-11 Immunity to voltage dips and short interrupts