

What is the Senquip ORB-X1



The Senquip ORB-X1 connects to standard industrial sensors and allows remotely measured data to be delivered to users anywhere in the world through the Senquip Portal or direct to a customer server.

The X1 has built-in sensors to allow the measurement of supply voltage, battery voltage, time, position, speed, ambient temperature, humidity, pitch, roll and pressure. Additionally, users can connect almost any industrial sensor to the X1 to enable other measurements.

Data measured by the ORB-X1 is transmitted to the internet via Wi-Fi (WLAN) or GSM and can be delivered to the Senquip Data Portal or to your own server.

Flexible measurement timing makes the X1 a low power device that can be operated off replaceable batteries, solar with integrated battery backup, or permanent power.

The ORB-X1 has been designed for use in harsh outdoor environments such as mining, marine, agriculture, industry and smart cities.

You can rely on the Senquip ORB-X1

The Senquip ORB-X1 has been designed from the ground up to offer a reliable, capable, flexible and secure remote monitoring platform for industrial users.

Reliability, the Senquip ORB-X1 has been designed for use in challenging environments where reliability is paramount. Where other devices fail, the Senquip ORB-X1 will continue to deliver data, reducing overall cost of ownership and an enhanced user experience.

Capability, the Senquip ORB-X1 has more on-board monitoring, allows connection to more external sensors and has the most versatile power requirements of any industrial monitor in its class.

Flexibility, the user interface is simple to use and yet allows enough flexibility to ensure compatibility with almost all industrial sensors.

Security, all data collected is encrypted and is transmitted using secure connections.

Ownership, at Senquip, we believe that the customer owns their data. We deliver your data to your servers in a private, secure manner. We will not access, use or resell your data - it is yours.

Power Supply

The Senquip ORB-X1 has been designed to offer maximum flexibility in terms of power supply requirements and is able to run off permanent power, solar (with internal rechargeable lithium battery) or replaceable AA batteries. Low power design techniques ensure the longest possible run-time when operating off batteries.

Permanent power

A wide input range of 9-75V operation allows for use in automotive, industrial and telecoms applications. System power is backed up with an internal lithium polymer rechargeable battery in the event of power outages. Supply voltage is monitored to a resolution of 100mV and can be reported on a periodic basis if enabled.

The supply voltage input is reverse polarity protected and is resistant to damage from static and surge.

The ORB-X1 can be used with a solar panel as a source of power. When running on solar, the panel needs to be able to collect enough energy during sunlight hours to power the ORB through the night and on cloudy days. Keep in mind that solar panels will tend to get dusty and so should be over-rated to avoid regular maintenance.

Senquip Portal

The Senquip Portal is Senquip's secure cloud solution that is powered by AWS. The portal allows for:

- numerical and graphical viewing of current data,
- long term data storage,

- remote modification of ORB settings,
- remote updates to ORB firmware,
- event forwarding,
- user account management.

By default, access to the Senquip Portal is enabled; it is highly recommended that users retain this setting. If disabled, ORB settings may not be able to be changed remotely and important firmware changes will not be able to be performed. Two instances where access to the portal may be disabled are in very power battery operated applications and where the ORB is connected to an alternate MQTT server.

For more detailed applications visit www.senquip.com