ONE SYSTEM.
REAL CONTROL.

Wi-Fi | RF | 4G | Satellite | Ethernet

From field control to cloud visibility.



3DM.Space
Cloud SCADA

PassPort
Edge Gateway

Mako V2
Industrial PLC

Solaris
RTU PLC

SMITHTEK

Product Capability Brochure

Contents

INTRODUCTION

Smithtek Ecosystem 3
Smithtek Topology 4
Product Applications 5

MAKO V2 PLC

Overview 6
Special Features 7
Technical Specifications 8
IO 9-10

SOLARIS RTU PLC

Overview 11
Special Features 12
Technical Specifications 13

VNET2 PROGRAMMING 14

SOFTWARE

PASSPORT IGW

Overview 15
Special Features 16
Technical Spec 17
IO 18-19
Programming Software (Node-RED) 20

3DM.SPACE - CLOUD SCADA

Overview 21
Special Features 22

HOW THE SYSTEM WORKS

Overview 23-24

APPLICATIONS, CONTACT & PRICING

Applications 25-33
Pricing 34
Contact 35

Smithtek Ecosystem

A Complete Integrated Telemetry System

Smithtek's suite of products operates within a harmonious 3-point topology, seamlessly interconnecting the cloud, edge gateway, and edge devices. Together, they offer an all-encompassing telemetry system embedded with independent automation logic.

1. **Mako V2 PLC & Solaris RTU PLC-** The Edge Device:
    - Role: Serves as the nerve-end, interfacing directly with physical sensors.
    - Operation: Capable of independent functioning or as a node within a mesh network.
    - Flexibility: Designed for dual operation - it can act as both a master and a slave device simultaneously, making it adaptable to varied network requirements.
2. **PassPort Gateway** - The Edge Gateway:
    - Communication: Bridges the gap between the Mako PLCs using its RF modem, ensuring effective and consistent communication between edge devices.
    - Interface: Equipped with RS485, allowing it to interface with a plethora of devices.
    - Versatility: Can be configured as a slave device, a master, or a combination of both, catering to a diverse range of network setups.
3. **3DM.Space** – Central Monitoring, Control & Visualisation:
    - Connectivity: Connects field data from the PassPort Gateway and Mako PLC into one central cloud platform, supporting remote monitoring and control across connected assets and sites.
    - Centralisation: Provides a single point to monitor, control and manage your entire system. Live data, alarms, historical trends and custom dashboards give users clear visibility of asset performance, while long-term data storage allows past performance to be reviewed whenever required.

Together, these three pillars of Smithtek create a **resilient** and **adaptable ecosystem**, ensuring that industries have a reliable, future-proof, and comprehensive solution for their telemetry and automation needs.

Smithtek Topology

Our devices excel as standalone units,
yet they seamlessly integrate to craft robust
communication networks tailored to your application.



LoRa™
RF







- Agriculture
- Mining
- Utilities
- Automation
- Portable Plant
- Refrigeration
- Tank Management
- Bore Pumping
- Marine-Offshore

SMITHTEK

Products Application Use

Our products have been designed to cater for the following industries and applications:

- **Mining:** Wireless solutions for various mining needs
- **Utilities:** Enhance power, water, and gas distribution.
- **Agriculture & Irrigation:** Tools for modern crop management, soil analysis, and water distribution.
- **Water Management:** Optimised for bore pumping, water pumping, and sewage pumping, medium transfer
- **Asset Management:** Track and remotely control portable skids and generator sets.
- **Telemetry & Automation:** Advanced telemetry systems for remote control and automated operations.
- **Security:** Robust tools for safeguarding assets.
- **Public Services:** Solutions for government parks and public spaces.
- **Environmental:** Tools for monitoring and maintaining natural resources and habitats.
- **Marine:** Solutions tailored for both onshore and offshore marine activities.
- **Building Systems:** Comprehensive tools for BMS, home automation, both in industrial and domestic settings.
- **Metering:** Metering solutions including flow meters and energy meters for commercial, industrial, and domestic applications.

With a strong focus on innovation and reliability, **Smithtek** ensures each product aligns with the demands and specific requirements of these diverse sectors.

Mako V2 PLC

Overview



Smithtek's Mako V2 PLC is designed to provide the ultimate solution for telemetry, automation, monitoring and control. With a focus on reliability, simplicity, and future-proofing, this cutting-edge device combines the power of an IoT device and an ultra-fast PLC.

With its compact size, embedded **RF, Wi-Fi, GPS,** and direct IoT connectivity, the **Mako V2** is an ideal choice for remote applications, especially large sites. Its RF capability allows for seamless communication over the air, enabling remote control and monitoring of your equipment. The device's direct IoT connectivity further enhances its usefulness, allowing you to easily connect it to the internet for remote control and monitoring.

The Mako's VNET2 configuration software is user-friendly, with a drag-and-drop flow-based design that accommodates users of all technical levels. Its modern communication protocols, IoT connectors, and traditional PLC tools provide a seamless and powerful experience, unlocking endless creative possibilities. In conclusion, the **Mako V2** represents a revolution in control, breaking down traditional barriers and paving the way for a more connected and efficient future.

Mako V2 PLC

Special Features



- 240 MHz, dual-core Xtensa® 32-bit LX6 MCU.
- Multi-communication capability: RF, Wi-Fi and RS485 simultaneously.
- High-precision 16-bit 4–20 mA analogue inputs.
- Low-power mode.
- RF frequency range: 300 to 1000 MHz.
- **Up to 20 km LOS RF** communications.
- Single, mesh, master and slave modes.
- microSD storage for data logging.
- GNSS (GPS, GLONASS, Galileo).
- **8 × digital inputs,** all assignable as pulse inputs from 1 Hz to 1 kHz.
- **8 × digital outputs,** NPN transistor type.
- 2 × 0–5 V inputs, assignable as digital inputs.

- 3 A relay version available with 5 outputs.
- Wi-Fi: IEEE 802.11, WPA2-AES security.
- Modbus RTU/TCP: 2 independent channels, each configurable as master or slave.
- Internal power supply sensing, assignable within VNET2.
- HTTP and HTTPS with SSL security.
- Secure MQTT 3.1 communication.
- Advanced data handling tools: JSON, binary, packets, ASCII and Base64.
- VNET2 programming IDE: Dedicated software for programming the Mako and Solaris with a simple interface and a wide range of built-in programming tools.
- Compact, rugged design with hardened 35 mm DIN-rail connectors.

Mako V2 PLC

Technical Spec

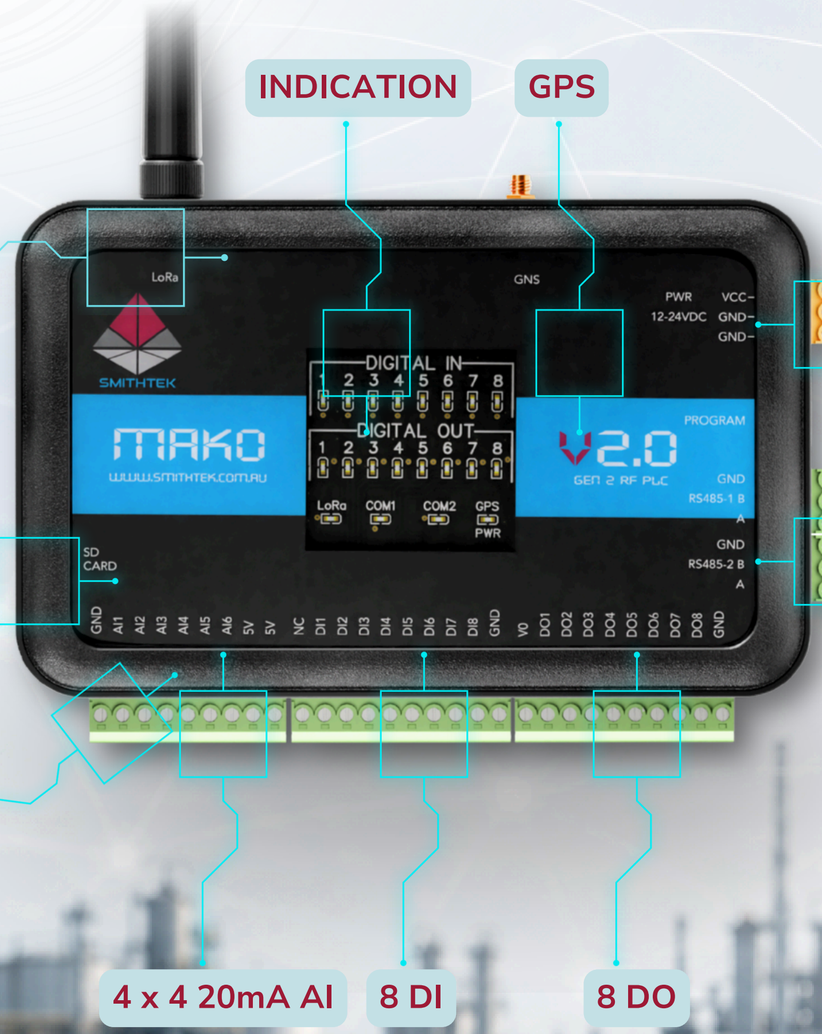
Device Specs	Voltage Supply	9-28VDC
	Power Max	2.16 Watts
	Load Idle	90mA
	Load Each Relay	23mA(Relay Version)
	Operating Temperatures	-40 to 85 °C
	Operating Humidity	0 – 95% RH (NC)
	Dimensions	160/98/34 mm
	Dimensions with Terminals Connected	178/117.5/39.5 mm
	Enclosure Material	ABS (ROHS)
	Programming Communication Method	USB Type A
	Terminals	2.54mm socket connectors WIRE SIZE 2.5MM
	Mounting Option 1	Spring load (35mm Din-rail clips)
	Mounting Option 2	Desktop
LoRa Radio	RF Type	LoRa Modulation
	RF BW	62.5-500kHz
	RF Frequency	169-915MHz
	TX Power	0-20dBm max 100mW
	Encryption	128bit AES
	Antenna Type	SMA Female
	TX Load	18.75mA at 24VDC 0.45W
	RX Load	4mA at 24VDC 0.095W
Wi-Fi	Radio RF	2.4GHz
	Security	WPA, WPA2, WPA3 , AES
	Standards	802.11 b/g/n
	TX Power	0 - 20.5dBm
	TX Load	54mA ave at 24VDC
	Rx Load	18.75mA ave at 24VDC
IO	Digital Input	PNP open collector >10.5VDC True <6VDC False
	Digital Input	Pulse input 0.1hz to 1kHz. Program debounce 0 to >99999mS
	Digital output Relay	3A max 150VDC
	Digital output Transistor	Transistor NPN Max 200mA per output
	4 20mA Analog Input	Single ended 16bit ADC
	0-5VDC Analog Input	Single ended 12bit ADC
	RS485-1	TVS protected with built in 120Ω Terminator
	RS485-2	TVS protected with built in 120Ω Terminator



GNS	Update frequency	1Hz
	Tracking channels	32
	Positioning Precision	2.5M
	Cold start	32 seconds first fix
	Hot start	< 3 seconds from power-up
	System Features	Reads up to six satellite navigation systems and implements joint positioning, navigation.
	Navigation Satellite Systems	BeiDou ,GPS,GLONASS,Galileo
	Latitude	(DD) decimal degrees -7 decimal places
	Longitude	(DD) decimal degrees -7 decimal places
	Course	0-360 degrees
	Speed	Feet per second
	RX load	4.8mA at 24VDC , 0.115W
Compliances	CE	2014/30/EU
	CE	RED
	RCM	AS/NZS 4417.1, 44171.2
	RCM	AS/NZS 3820
	RCM	AS/NZS 4268
	FCC	Part 15.249
	FCC	Part 15.247

Mako V2 PLC

IO



- 10.5-28VDC Supply
- 4 * 4-20mA Analog Inputs
- 2 * 0-5VDC Analog Inputs
- 8 * Digital Inputs / Pulse Inputs 1khz
- 8 * Digital Outputs, Transistor NPN
- 5 * 3A Relay MV2-R Version Only
- 2 * RS485 Serial Ports
- 1 * Micro SD (Data Storage)
- 1 * GNS- GPS/GLONASS/GALILEO
- 1 * RF Radio Coms 20 KM
- LED Coms Indication
- Internal Battery Supply Sensor

Mako V2 PLC

IO

LoRa RF

GPS

Modbus

MQTT

HTTP

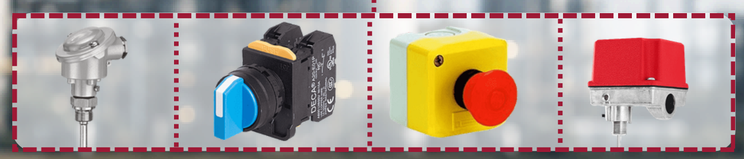
UDP

TCP

microSD















SMITHTEK

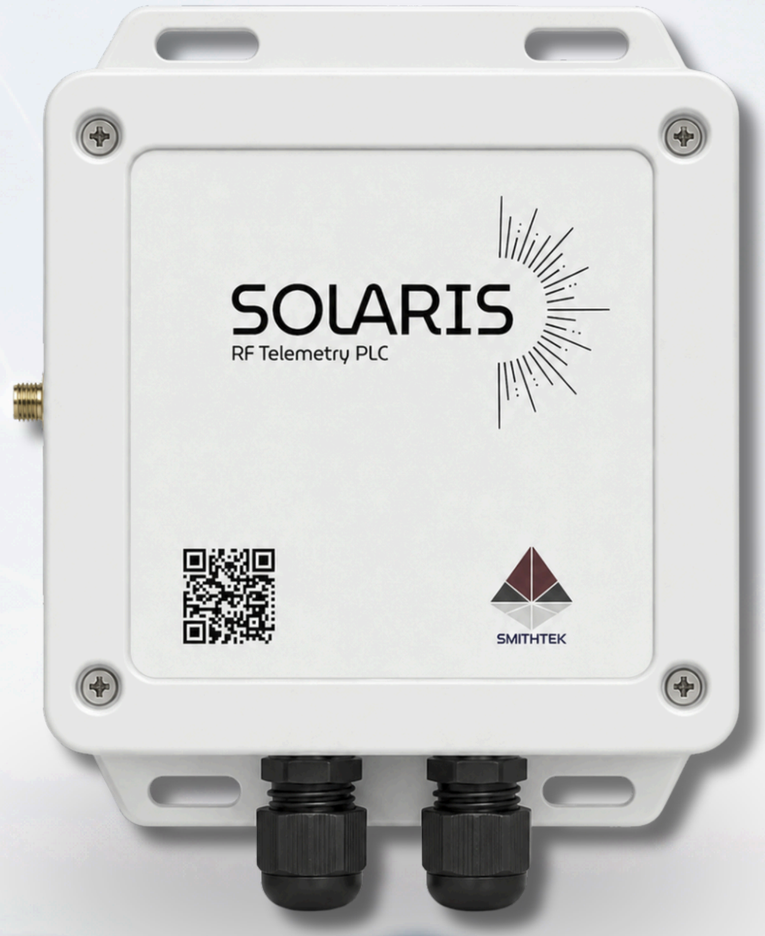
Solaris RTU PLC

Overview

The **Solaris RTU PLC** is a compact, weatherproof telemetry and control unit designed for remote monitoring and automation applications. Based on the proven Mako PLC platform, Solaris delivers essential PLC and telemetry functionality in a simplified, **low-power package**, making it ideal for remote sites where reliability, ease of deployment, and energy efficiency are critical.

Supplied as a complete solar-powered telemetry station, each Solaris unit combines the RTU PLC, solar charge controller, battery system, antenna, and solar panel into a single purpose-built enclosure. The system has been specifically designed for rapid installation, typically requiring only bandit straps or simple mounting hardware to secure it to a pole, fence, tank stand, or existing structure. This minimises installation time and reduces the need for complex site works.

Solaris is suitable for a wide range of applications including **water tanks, pump stations, bore fields, irrigation systems, environmental monitoring, wastewater infrastructure, generators,** and other **remote assets.** The unit can monitor digital and analogue inputs, control outputs, log operational data, and communicate with remote monitoring platforms.



Solaris RTU PLC

Special Features



Remote Deployment & Design:

Weatherproof Design: Built for remote outdoor monitoring and control. IP65.

Rapid Installation: Simple mounting to poles, fences, tank stands or existing structures.

Compact RTU: Essential PLC and telemetry functions in a simplified field-ready package.

Power & Independence:

Solar Powered: Designed for standalone off-grid deployment.

Integrated Power System: Solar charge controller, battery system and solar panel, available as a complete integrated solution.

Low-Power Operation: Optimised for reliable unattended operation at remote sites.

Monitoring & Control:

Field Monitoring: Monitor digital and analogue inputs from connected sensors.

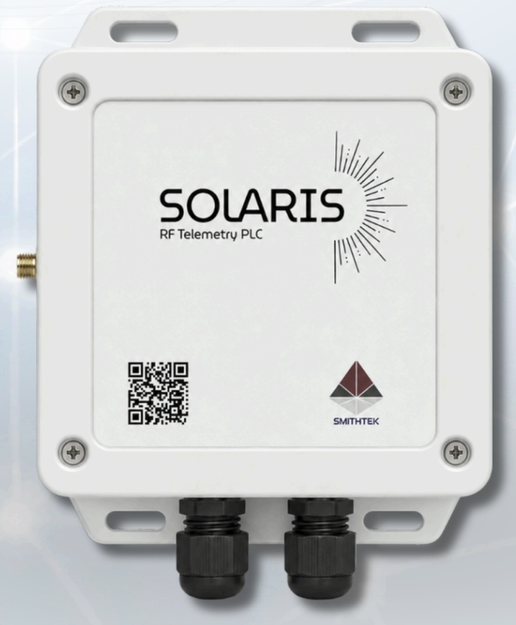
Remote Control: Control connected equipment and outputs.

Data Logging: Record operational data locally.

SCADA Ready: Communicate data to remote monitoring platforms such as 3DM.Space.

Solaris RTU PLC

Technical Spec



Solaris PLC:

Voltage Supply: 12-24 VDC
Power Consumption: 0.65 W
Maximum Load: 1 A @ 12 VDC
Relay Maximum Load: 1A
Analog Input: 4-20 mA
ADC Resolution: 10-bit ADC
RF Frequency: 472.0625 MHz
RF Bandwidth: 125 kHz / 62.5 kHz
Maximum RF Range: Up to 15 km
Digital Inputs: PNP High-Side
Pulse Input: Assignable
RS485: Selectable 120 Ω Termination
Protection: Auto-Reset Fuse
IP Rating: IP65
Weight: < 400 g
Dimensions: 120 × 150 × 60 mm
Material: ABS

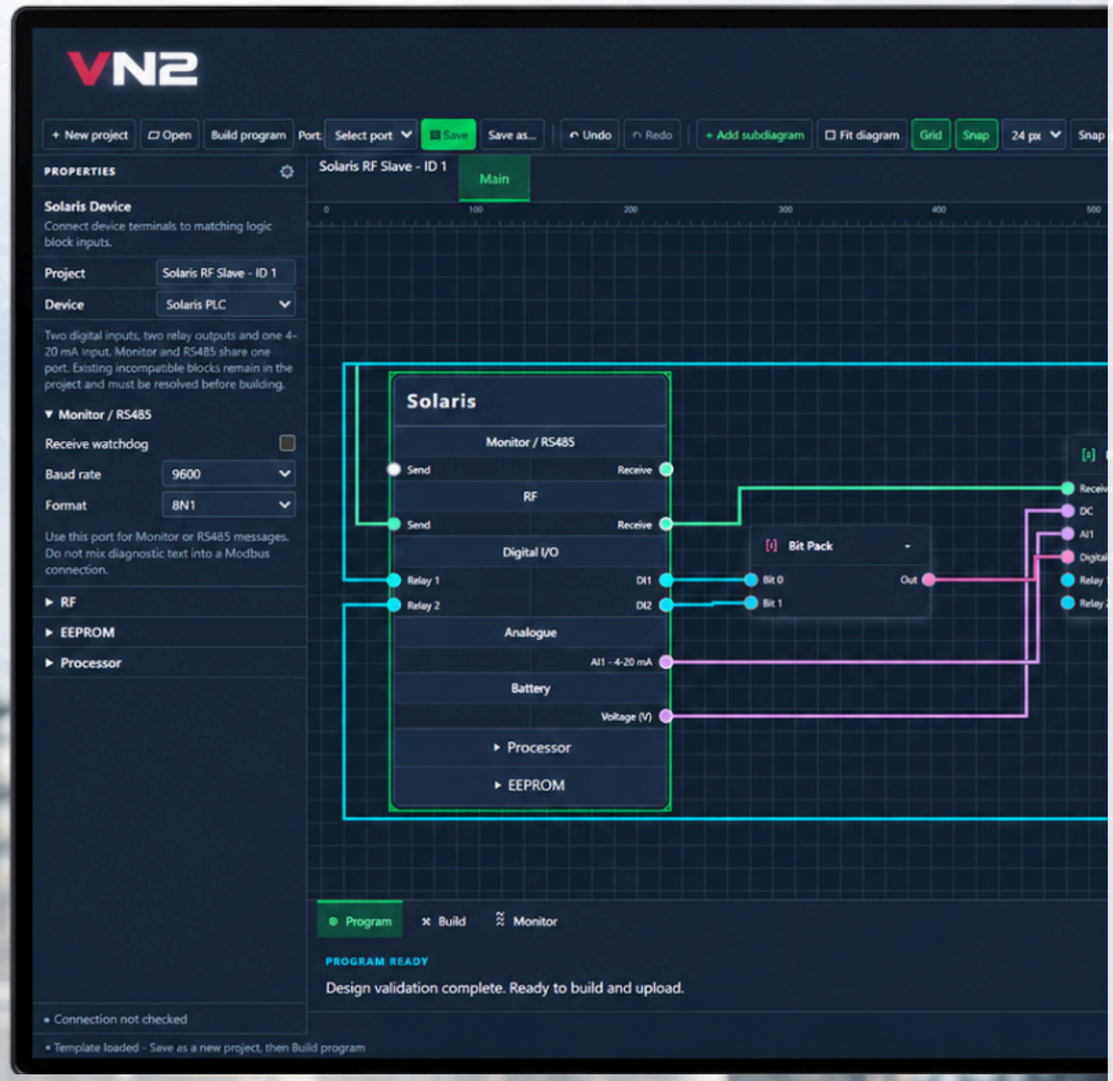
Power Station Specs:

Model: S-3024 Solar Power Supply System
Solar Panel: 30 W monocrystalline
Panel Size: 420 mm × 390 mm × 20 mm
Panel Efficiency: 21.7%
Protection Rating: IP66
Battery Capacity: 8Ah / 88.8 Wh
Rated Voltage: DC 9 V to 12.6 V
Maximum Charge Current: 7 A
Maximum Output Current: 5 A
Operating Temperature: -30°C to 85°C
Mounting Angle: Adjustable, 0° to 45°
System Weight: 4.4 kg
DC Output Cable: 1 m, 2 × 0.75 mm² copper



VNET2

Programming Software



Developed for Smithtek's **Mako V2** and **Solaris PLCs**, **VNET2 (VN2)** is a powerful, intuitive and versatile visual programming Integrated Development Environment (IDE). Its modern **drag-and-drop interface** makes advanced automation **accessible** to **electricians**, **technicians** and equipment builders without traditional coding experience. The workspace visually represents the PLC's inputs, outputs and communication ports, allowing users to connect logic blocks, configure settings, build and upload programs in one environment.

At the heart of **VN2** is an extensive library of **purpose-built blocks** that simplify complex programming functions, including motor and duty-pump control, equipment protection, visual interlocking, PID control, hysteresis, timed sequencing, flow measurement, alarms, timers and retained values. Ready-made templates for **tanks**, **pumping**, **irrigation**, **farming** and **marine** applications reduce setup time, while built-in guidance and subdiagrams make larger programs easier to manage.

VN2 simplifies integration with sensors, smart meters and hardware extensions through preconfigured blocks supporting **RF telemetry**, **RS485** and **Modbus RTU**. Its standout PassPort Connect feature automatically generates matching **Node-RED** Read and Write nodes from the PLC's communication configuration, reducing manual setup and integration work.

For advanced applications, the Mako PLC also supports Wi-Fi connectivity, local web dashboards, MicroSD data logging and direct **3DM.space cloud SCADA integration**. VN2 supports AI-assisted custom logic block creation and local programming without internet access, delivering sophisticated industrial control in an accessible visual programming environment.

PassPort IGW

Overview



The **PassPort** is an industrial IIoT gateway designed for both local and remote communication with Makos and other devices, spanning distances of up to 20 km using its **RF antenna**.

Though it's adept at off-grid operations, the PassPort can also connect to the internet via **4G-LTE, Wi-Fi, Satellite, or Ethernet**. At its core lies IBM's Node-RED, a visual programming tool crafted for integrating various hardware devices.

As a gateway, the **PassPort effortlessly links multiple devices** and can communicate with thousands of sensors, positioning itself as a premier telemetry management platform. With advanced security encryption techniques, it ensures your sensor data remains safeguarded.

PassPort IGW

Special Features



Efficiency & Design

Rapid Deployment: Set up swiftly and effectively.

Space-Saving Design: Optimised footprint for minimal space occupation.

Communication & Range:

RF Antenna: Superior connection with multiple Mako and Solaris PLCs over distances of up to 20 km.

Independence & Connectivity:

Standalone Capability: No mandatory internet connection required for operation and device control.

Internet Ready: Options for Ethernet and Wi-Fi connectivity.

Software & Compatibility:

IBM's Node-Red: Pre-installed for seamless device integration.

Versatile Connectivity: Features 2 x RS485, making it compatible with thousands of industrial devices.

Pre-loaded Nodes: Ensures a quick start to get your application operational.

Data Management:

Flexible Visualisation: Real-time data display on 3DM.Space, or opt for your preferred cloud service.

Ample Storage: 8 GB of data storage capacity.

Store & Forward: Sensor data is stored locally and transmitted when the network becomes available.

PassPort IGW

Technical Spec

Device Specs	Voltage Supply	9-28VDC
	Power Max	3.6 Watts
	Load Idle	300mA at 12VDC, 150mA at 24VDC
	Operating Temperatures	-40 to 85 °C
	Operating Humidity	0 – 95% RH (NC)
	Dimensions	160/98/34 mm
	Dimensions with Terminals Connected	178/117.5/39.5 mm
	Enclosure Material	ABS (ROHS)
	Programming Communication Method	USB Type A
	Terminals	2.54mm socket connectors WIRE SIZE 2.5MM
	Mounting Option 1	Spring load (35mm Din-rail clips)
	Mounting Option 2	Desktop
LoRa Radio	RF Type	LoRa Modulation
	RF BW	62.5-500kHz
	RF Frequency	169-915MHz
	TX Power	0-20dBm max 100mW
	Encryption	128bit AES
	Antenna Type	SMA Female
	TX Load	18.75mA at 24VDC 0.45W
	RX Load	4mA at 24VDC 0.095W
Wi-Fi	Radio RF	2.4GHz
	Security	WPA, WPA2, WPA3 , AES
	Standards	802.11 b/g/n
	TX Power	9.5 -28.2 mW (9.8 - 14.5 dBm
IO	RS485-1	TVS protected with built in 120Ω Terminator
	RS485-2	TVS protected with built in 120Ω Terminator
LAN	Ethernet	Gigabit Ethernet

USB to UART GNS	Update frequency	1Hz
	Tracking channels	32
	Positioning Precision	2.5M
	Cold start	32 seconds first fix
	Hot start	< 3 seconds from power-up
	Navigation Satellite Systems	BeiDou ,GPS,GLONASS,Galileo
	Latitude	(DD) decimal degrees -7 decimal places
	Longitude	(DD) decimal degrees -7 decimal places
	Time Epoch	Time since 1970 in seconds
	Time UTC	ISO 8601
	Course	0-360 degrees
	Speed	Feet per second
	RX load	5.4mA at 24VDC , 0.129W
Compliances	RCM	AS/NZS 4417.1, 44171.2
	RCM	AS/NZS 3820
	RCM	AS/NZS 4268

SMITHTEK

PassPort IGW

IO



- 10-28VDC supply
- 2 * USB2-A
- 2 * USB3-A
- 2 * RS485 Serial Ports
- 5VDC Output
- Ethernet (RJ45)
- 1 * RF Comms Modem

PassPort IGW

IO



PassPort IGW

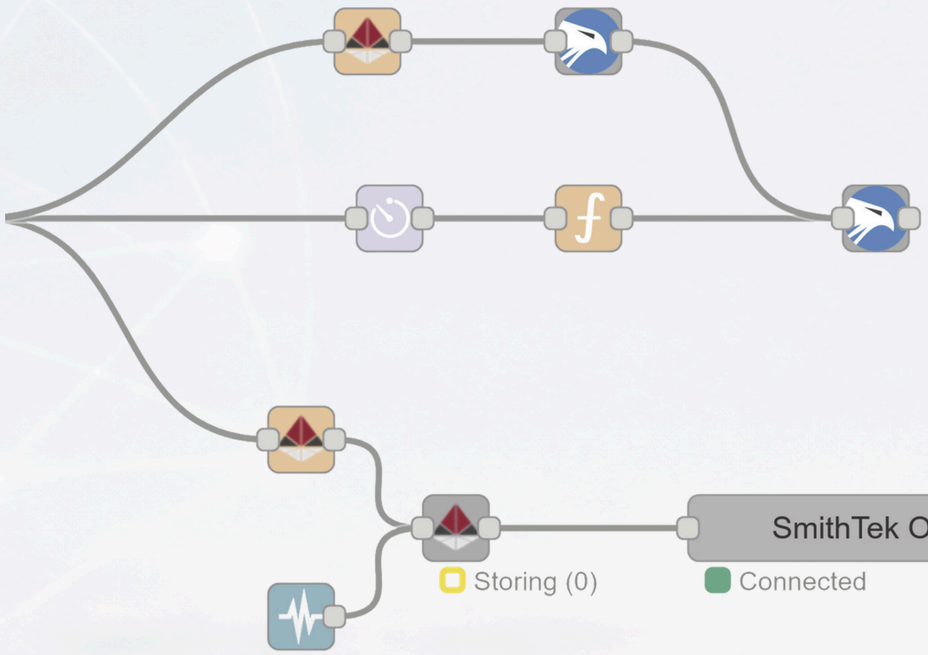
Programming Software

The **PassPort Gateway** is powered by **Node-RED**, enabling seamless communication with Makos through the RF antenna. Serving as a central Distributed Control System (DCS), it allows for remote access and configuration of site-wide logic.

The driving force behind the PassPort is IBM's Node-RED, an innovative **flow-based** development tool specifically crafted for visual programming, making it ideal for integrating hardware devices and sensors. With the capacity to **connect a multitude of devices**, the PassPort Gateway can interface with **thousands of sensors** in real-time.

As a standalone gateway controller, the PassPort is meticulously designed to act as the primary site controller, disseminating logical and event-driven commands to all its connected devices.

Smithtek, in its quest for **innovation** and **integration**, has developed a variety of nodes that simplify the process of interfacing with other services and logical functions. This tailored approach further enhances the capabilities of **Node-RED**, streamlining connections and operations. Furthermore, a seamless IoT connector has been integrated, facilitating a direct link to the cloud platform, thus amplifying the gateway's prowess in real-time communication and data management.



CLICK HERE

3DM.Space

Cloud-Based SCADA Platform



3DM.Space is a secure **cloud-based SCADA platform** designed for monitoring, control, alarms, event tracking, and data visualisation across connected Smithtek systems. It provides a modern way to **view live site data, control equipment, manage users,** and **respond to alarms** from almost anywhere with internet access.

The platform is designed to **work seamlessly with Smithtek products** such as the **PassPort Gateway, Mako PLC** and **Solaris PLC.** PassPort Gateways can connect using 3DM nodes, while Mako PLC systems can communicate using the 3DM protocol. This allows field hardware to send data directly into 3DM.Space, where it can be stored, displayed, alarmed, and used for remote control.

3DM.Space allows administrators and approved users to build modern SCADA dashboards using a **simplified dashboard builder**. Dashboards can be created to show live values, equipment status, process information, trends, alarms, maps, tables, control buttons, and other site-specific information. **Multiple dashboards** can be created for different sites, systems, users, or operating requirements.

Live device data is captured, stored, and displayed visually through the platform. Depending on the device setup and communication method, refresh times can be as fast as 30 seconds. This gives users a clear and timely view of what is happening across their connected equipment.

3DM.Space

Special Features

SCADA Canvas & Advanced Visualisation

Build complete graphical SCADA screens around your actual process or site.

- Pumps, tanks, valves, motors and equipment status
- Gauges, LEDs, values, tables and run indicators
- Custom backgrounds, P&ID-style layouts and site graphics
- **500+ widgets** across 14 default widget bundles
- Charts, maps, alarm tables, gauges, environmental and industrial widgets

The SCADA Canvas also supports remote commands and setpoint changes directly from the visual process screens.

Historical Trends, Maps & Data Analysis

Move easily between what is happening now and what happened previously.

- Real-time and historical dashboard modes
- Custom date ranges and selectable time windows
- Average, minimum, maximum, sum and count aggregation
- Trend charts for flow, level, pressure and other telemetry
- GPS maps, site markers and remote asset locations

This makes 3DM.Space useful not just for live control, but also troubleshooting, performance review and investigating alarms or site events.

Live SCADA Dashboards & Remote Control

Create live dashboards for monitoring and controlling equipment from anywhere.

- Live telemetry, status and process information
- Remote start/stop, mode and control commands
- Adjust setpoints directly from dashboards
- Responsive layouts for desktop, tablet and mobile

3DM.Space dashboards can combine live values, controls, alarms, trends, maps and site information in a single operator interface.

Alarms, Events & Notifications

Know when equipment needs attention without constantly watching the dashboard.

- High/low levels and pressure conditions
- Pump faults, low voltage and shutdowns
- Device offline and communication alarms
- Alarm acknowledgement and management
- Configurable recipients, notification templates and rules

Notifications can automatically alert the appropriate users when an alarm becomes active or communications are lost.

Secure Access & Field Integration

Connect field equipment while controlling exactly what each user can see and operate.

- Integration with PassPort Gateway, Mako PLC and Solaris PLC
- Node-RED and 3DM telemetry integration
- Automatic creation and updating of telemetry variables
- Role-based permissions for viewers, operators, technicians and managers
- Separate customers, sites, dashboards and devices
- Audit and access-management tools

3DM.Space is designed to bring field telemetry into one secure cloud platform while allowing different teams or customers to access only the equipment and dashboards relevant to them.

How Our System Works Together?

3DM.Space serves as the central cloud hub within our system topology. It connects with the PassPort Gateway and compatible Smithtek field devices, bringing live telemetry, controls and alarms into one platform. Using 3DM connectivity, data is securely sent between the field and cloud, making 3DM.Space the central point for remote monitoring, control, historical data and visualisation.

The **PassPort** connects to the cloud through **Node-RED**. All the logical control Is handled through Node-RED, acting as a site-level control hub. It can send and retrieve sensor data it collects through its local interfaces. It has the ability to expand and integrate with industrial sensors, controllers like PLCs and data loggers. Its RF antenna allows it to further expand and communicate to Makos over long distances.

The **Mako PLC** is a versatile controller that can work on its own or as part of a wider control network. It operates as both a master and slave, giving you flexible deployment options. The Mako connects easily to industrial and digital protocol sensors, making it a reliable standalone solution. It can also link with the PassPort Gateway for full integration into your IoT system, enabling centralised data management and control.



The **PassPort** and **Mako** can operate autonomously, however, the true strength of the system emerges when they work together. **This synergy allows you to build a powerful and comprehensive control system.**

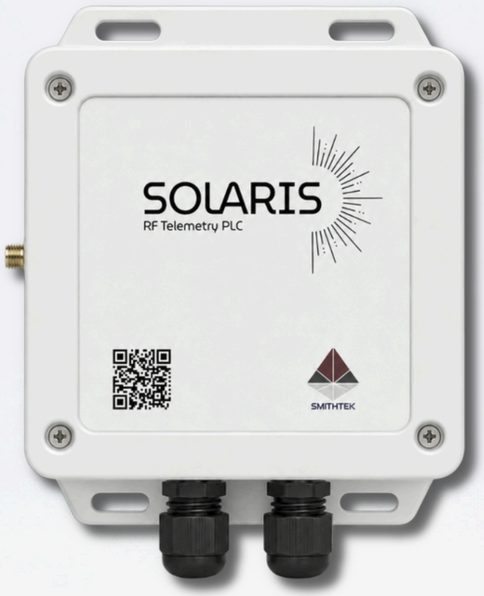
How Our System Works Together?

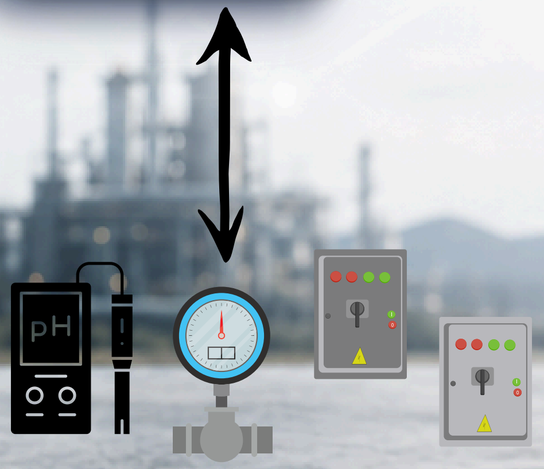
The Solaris RTU PLC collects data and controls equipment at the remote site. It communicates with the **PassPort Gateway via RF**, which sends the data to **3DM.space** for remote **monitoring and control**.

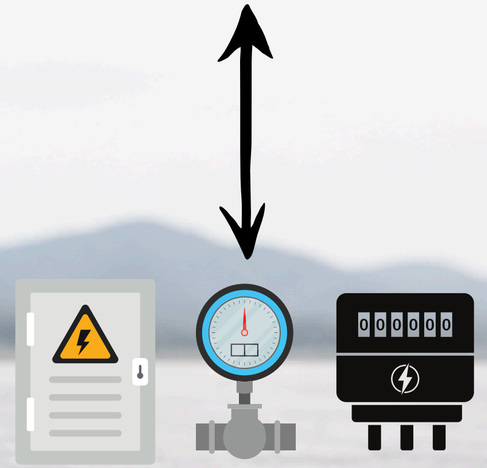
The **Solaris RTU PLC** is a compact, low-power controller designed specifically for remote monitoring and automation. It can operate as a standalone field unit, monitoring digital and analogue inputs, controlling connected equipment and logging operational data at the site. Designed for solar-powered and off-grid applications, Solaris is ideal for tanks, pumps, bores, irrigation systems and other remote assets. It can also communicate with remote monitoring platforms, providing reliable access to field data and control from dispersed locations.











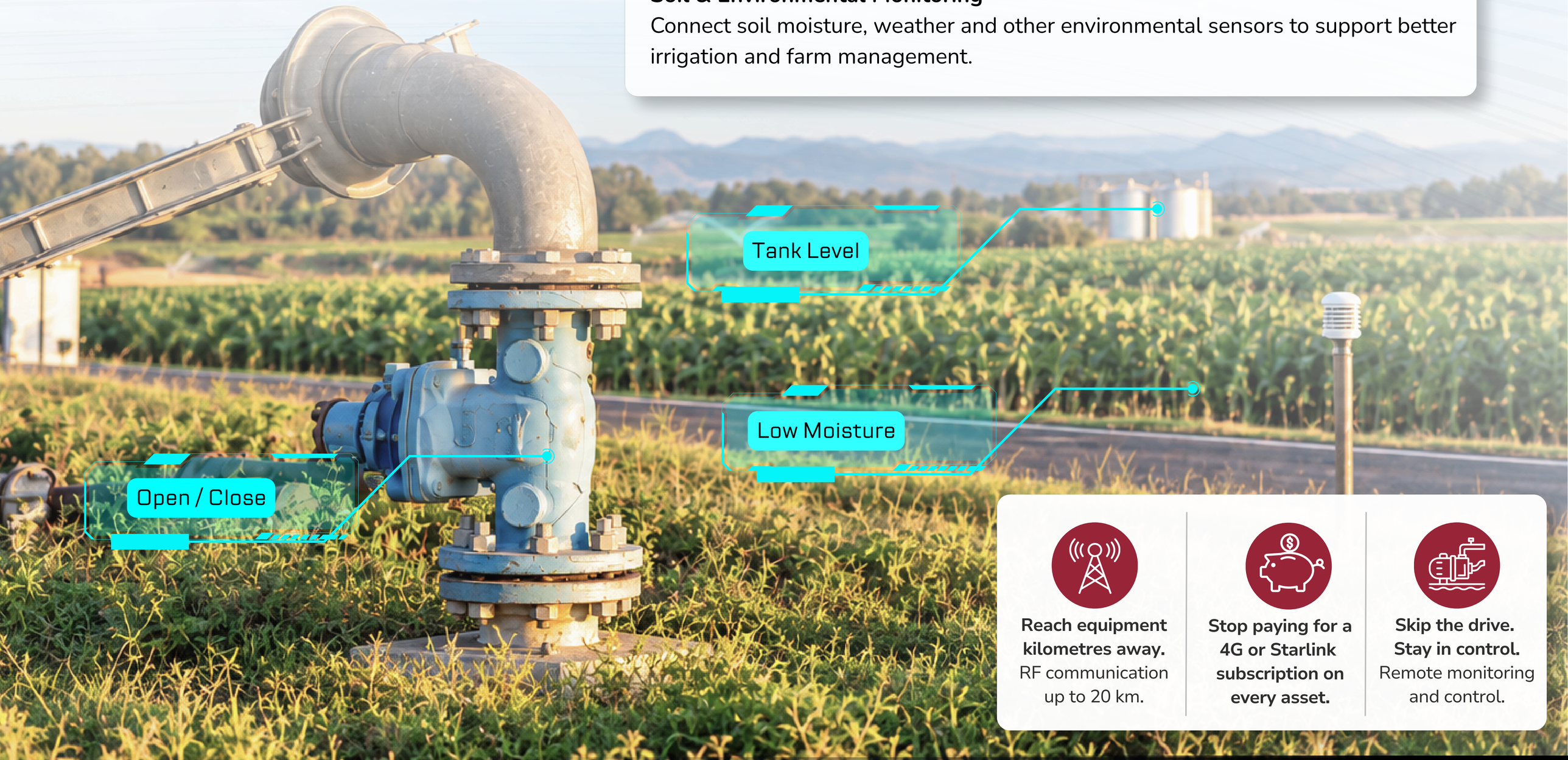
Agriculture

Monitor and **control** tanks, troughs, pumps, bores and irrigation from wherever you are.

Water & Irrigation Management
Monitor tanks, troughs, bores, pumps, valves, flow and pressure across farm water systems.

Pump & Bore Control
Start, stop and monitor pumps and bore systems remotely while keeping track of operating conditions.

Soil & Environmental Monitoring
Connect soil moisture, weather and other environmental sensors to support better irrigation and farm management.



Reach equipment kilometres away.
RF communication up to 20 km.

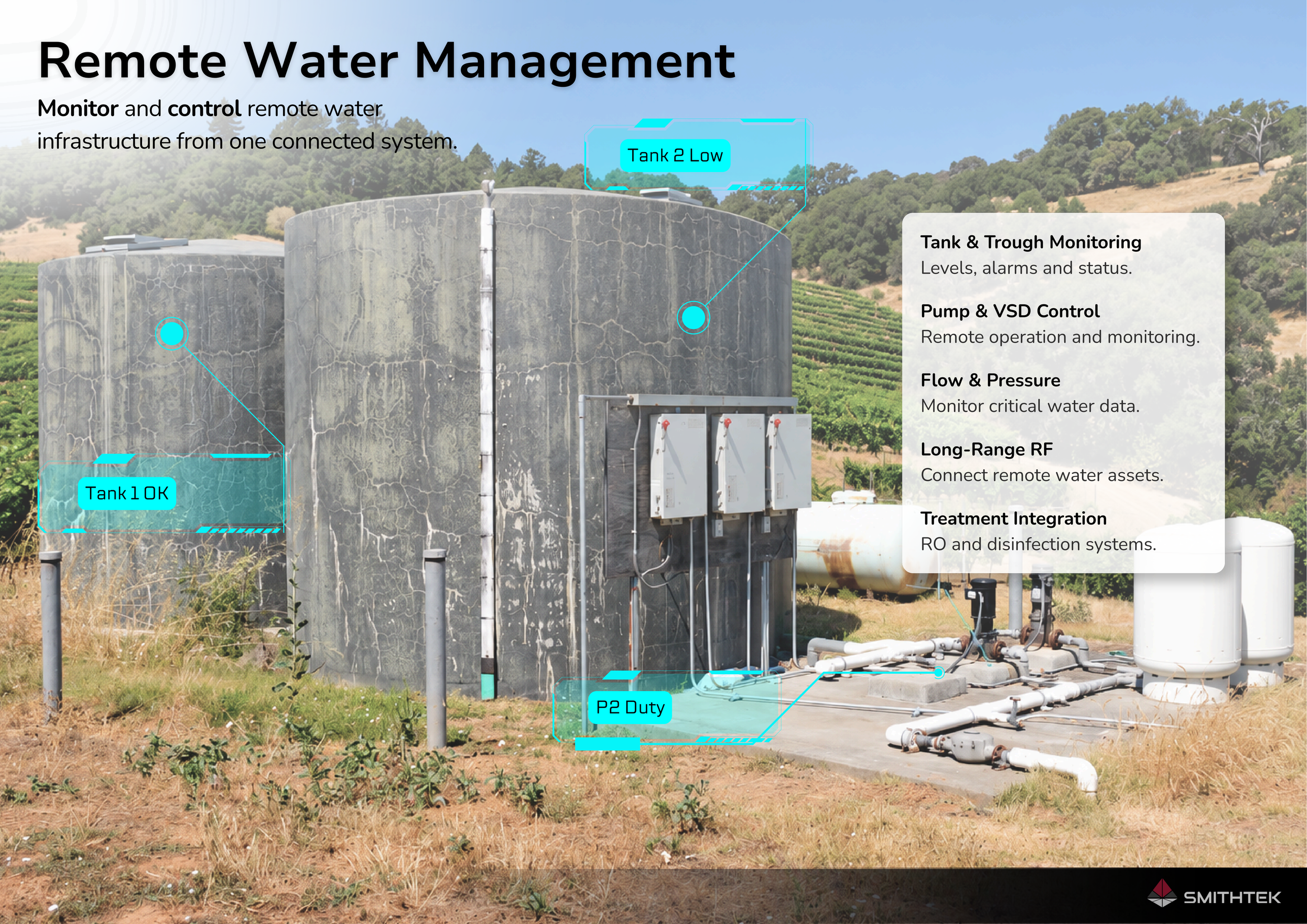
Stop paying for a 4G or Starlink subscription on every asset.

Skip the drive. Stay in control.
Remote monitoring and control.

SMITHTEK

Remote Water Management

Monitor and **control** remote water infrastructure from one connected system.



Tank & Trough Monitoring
Levels, alarms and status.

Pump & VSD Control
Remote operation and monitoring.

Flow & Pressure
Monitor critical water data.

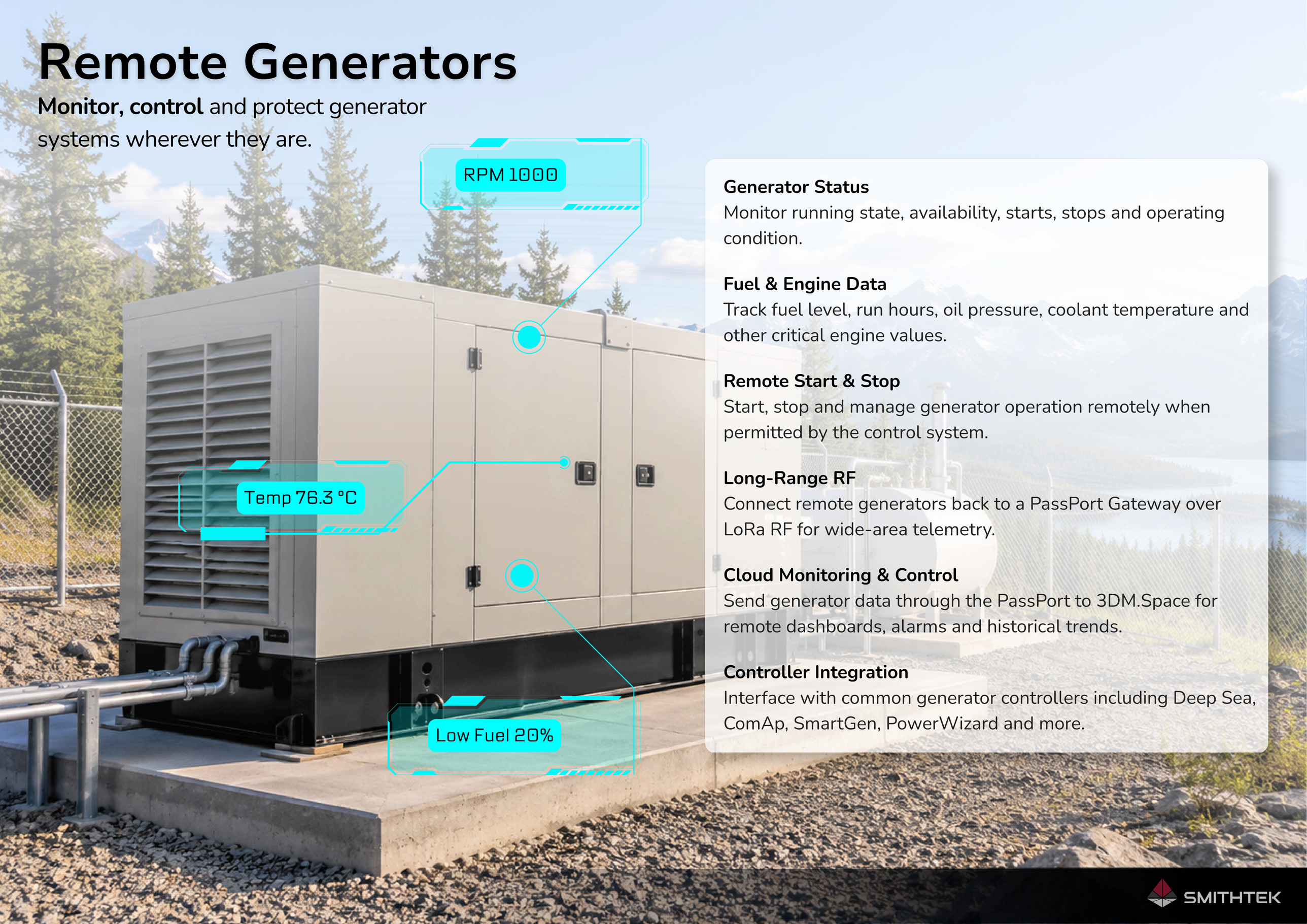
Long-Range RF
Connect remote water assets.

Treatment Integration
RO and disinfection systems.

SMITHTEK

Remote Generators

Monitor, control and protect generator systems wherever they are.



Generator Status
Monitor running state, availability, starts, stops and operating condition.

Fuel & Engine Data
Track fuel level, run hours, oil pressure, coolant temperature and other critical engine values.

Remote Start & Stop
Start, stop and manage generator operation remotely when permitted by the control system.

Long-Range RF
Connect remote generators back to a PassPort Gateway over LoRa RF for wide-area telemetry.

Cloud Monitoring & Control
Send generator data through the PassPort to 3DM.Space for remote dashboards, alarms and historical trends.

Controller Integration
Interface with common generator controllers including Deep Sea, ComAp, SmartGen, PowerWizard and more.

SMITHTEK

Mining

Monitor, **control** and **connect** equipment across remote and distributed mine-site operations.





Water & Bore Management
Monitor tanks, bores, pumps, flow and pressure across mine-site water infrastructure.

Equipment Monitoring & Control
Connect pumps, VSDs, valves, sensors and other plant equipment for local or remote operation.

Environmental Monitoring
Collect data from dust, weather, water quality and other environmental sensors across the site.

Dust Suppression Systems
Monitor water levels, pump status, flow, pressure and valve operation across dust suppression infrastructure.

Alerts & History
View trends and receive notifications when conditions change.

Marine Monitoring

Monitor **water conditions**, **marine assets** and remote sites across coastal, river and **offshore environments**.

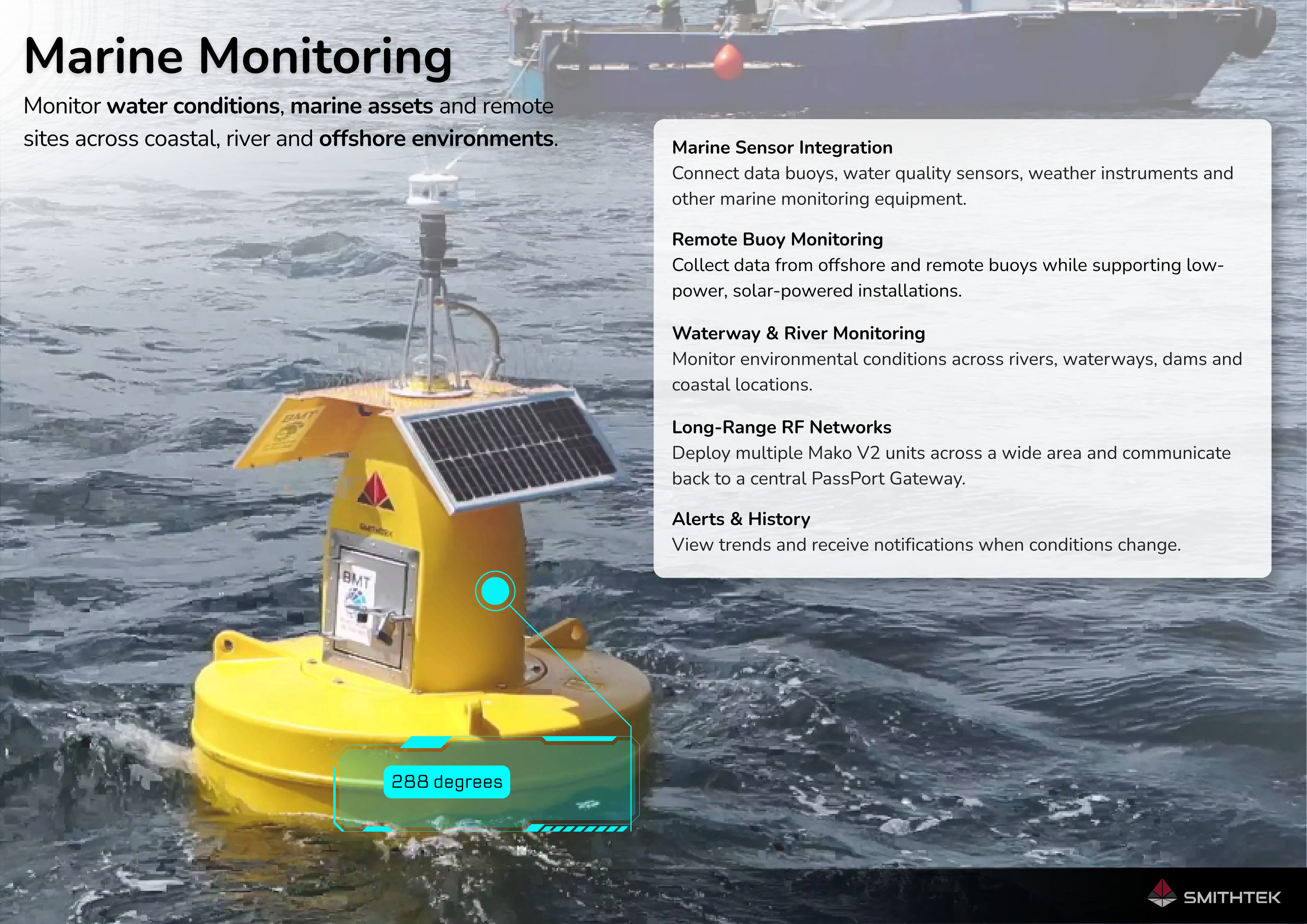
Marine Sensor Integration
Connect data buoys, water quality sensors, weather instruments and other marine monitoring equipment.

Remote Buoy Monitoring
Collect data from offshore and remote buoys while supporting low-power, solar-powered installations.

Waterway & River Monitoring
Monitor environmental conditions across rivers, waterways, dams and coastal locations.

Long-Range RF Networks
Deploy multiple Mako V2 units across a wide area and communicate back to a central PassPort Gateway.

Alerts & History
View trends and receive notifications when conditions change.



Parks and Public Spaces

Monitor and **control** public infrastructure across parks, reserves and community spaces.

Irrigation & Watering
Monitor and control irrigation systems, pumps, valves and water use across landscaped areas.

Lighting Control
Manage park, pathway and public-area lighting remotely or through automated schedules.

Environmental Monitoring
Connect weather, soil moisture, temperature and other environmental sensors.

Remote Asset Monitoring
Monitor pumps, tanks, fountains, amenities and other distributed public assets.

Alerts & History
View trends and receive notifications when conditions change.



SMITHTEK

Automation

Control, automate and connect equipment across one or multiple sites.

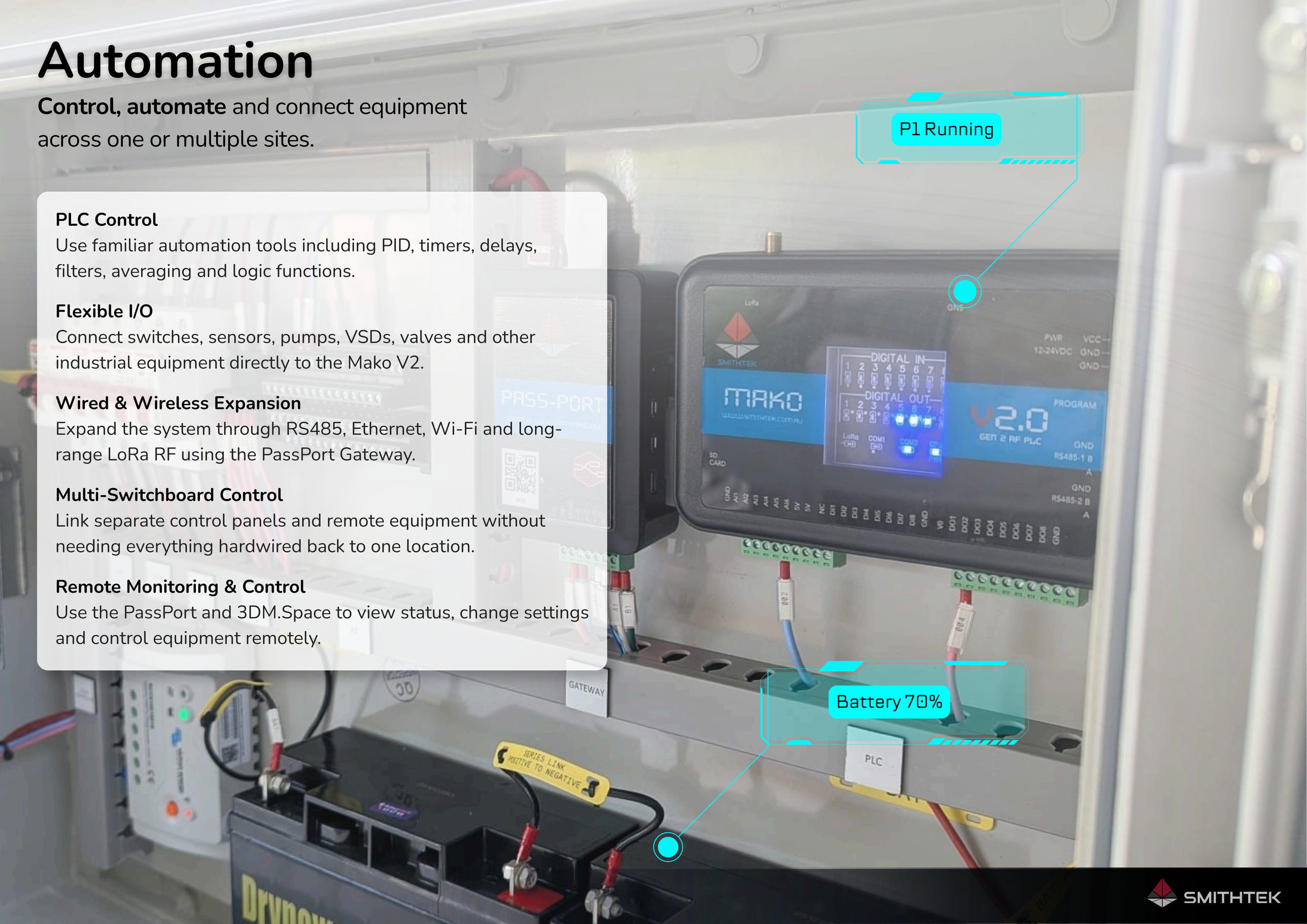
PLC Control
Use familiar automation tools including PID, timers, delays, filters, averaging and logic functions.

Flexible I/O
Connect switches, sensors, pumps, VSDs, valves and other industrial equipment directly to the Mako V2.

Wired & Wireless Expansion
Expand the system through RS485, Ethernet, Wi-Fi and long-range LoRa RF using the PassPort Gateway.

Multi-Switchboard Control
Link separate control panels and remote equipment without needing everything hardwired back to one location.

Remote Monitoring & Control
Use the PassPort and 3DM.Space to view status, change settings and control equipment remotely.



Flow & Energy Meter Monitoring

Measure, **monitor** and **analyse** flow and energy usage across connected assets.

Flow Meter Integration
Connect flow meters using pulse outputs or RS485 Modbus communication.

Energy Monitoring
Capture power and energy data to understand equipment usage and operating performance.

Pulse & Modbus Inputs
Use traditional pulse signals or direct Modbus communications depending on the meter type.

Scaling & Totalising
Configure flow rates, totalisers and engineering values directly through VNET2.

Remote Meter Networks
Use the Mako V2 and PassPort Gateway to collect data from meters spread across remote locations.

Centralised Data
Send meter data to 3DM.Space for dashboards, historical trends and ongoing analysis.



Environmental Monitoring

Monitor environmental conditions across remote sites with connected sensors and **long-range** telemetry.

Weather Monitoring

Connect weather stations to monitor temperature, humidity, rainfall, atmospheric pressure and other conditions.

Wind Monitoring

Measure wind speed and direction using anemometers and compatible environmental sensors.

Water & Chemical Sensors

Monitor parameters such as pH, conductivity, dissolved oxygen, water quality and other process or environmental measurements.

Marine & Remote Sensors

Integrate marine, coastal and remote environmental instrumentation through the Mako V2 or PassPort Gateway.

Alerts & History

View trends and receive notifications when conditions change.

Our products stand out for their **exceptional value** proposition. They are not only **low in cost** but also **highly reliable**, making them a **smart choice** for businesses looking to optimise their operations without breaking the bank. When compared to other PLC brands in the market, our offerings truly shine, delivering an impressive combination of affordability and dependability.

Product Pricing

ITEM	PRICE
Mako V2 PLC	$572.00
Mako V2 PLC GPS	$638.00
PassPort IGW	$550.00
Solaris RTU (PLC Only)	$330.00
3DM.Space Cloud SCADA	$330.00 per gateway / site per year.

All prices are in Australian dollars and include GST.

Our Mission

At Smithtek, we are a proud family-run business dedicated to empowering industries, communities, and remote operators across Australia. Our mission is to deliver reliable, locally built telemetry and automation solutions that simplify how people monitor, control, and manage their assets, from water and energy to environmental systems.

Built on the values of trust, integrity, and innovation, we believe technology should be practical, transparent, and designed to last. Every product we create represents our family's commitment to quality, honesty, and hands-on support. By combining robust Australian hardware with intuitive cloud platforms, we help our clients gain real-time visibility, improve efficiency, and make confident decisions, wherever they are.

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