

BEDROCK[®]

OPEN SECURE AUTOMATION

03

Breakthrough ICS Performance and Economy with Extreme Cyber Security Built In



A new generation of industrial productivity is now upon us and it rests on three fundamentals:

OPEN

Embracing open standards — so you save by not having to reinvent the wheel every time you want to build an application

SECURE

Securing critical controls from the inside out — so you can enjoy the business benefits of open technology without cyber vulnerability

AUTOMATION

Deploying the most powerful automation — so you can achieve new levels of efficiency and put real-time data analytics to work for you

Bedrock Automation anticipated these requirements more than five years ago and has built a revolutionary family of intrinsically secure control solutions designed specifically to help you make the most of digital transformation. We call our offering OSA® Open Secure Automation. It includes:

- ✓ **A secure, high-performance universal control system**
- ✓ **Secure, software programmable I/O**
- ✓ **Secure, compact remote controller**
- ✓ **Secure flow computer**
- ✓ **Secure standalone power supplies**
- ✓ **Uniquely adaptable cabling**
- ✓ **Free IEC 61131-3 compatible software**

“I like the acronym, OSA, Open Secure Automation. Bedrock continues to invent new products and solutions to address every problem that users have had to historically deal with on plant automation and safety systems. They are truly thinking differently about how to solve these problems. By reviewing much of the Bedrock technology, it appears almost obvious as the proper solution and you have to ask, “why hasn’t someone thought of this before?””

Sandy Vasser
Retired IC&E
Manager
ExxonMobil



UL rated for Class I,
Division 2
Hazardous Locations.

03 BEDROCK OSA®

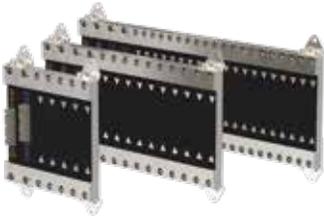
The world's most powerful, scalable and secure industrial control system

OSA® Open Secure Automation is Bedrock's award-winning automation and power platform with a revolutionary architecture and deeply-embedded cyber security delivering the highest levels of system performance, cyber security and reliability at the lowest lifecycle cost.



OSA®

The Bedrock OSA® and all Bedrock products are built in the USA with a Cyber Secure Supply Chain and come with a 5-year Warranty, free software, embedded security, all metal construction, - 40°C to +80°C (- 40°F to +176°F) operating range and are certified EMP resistant.



Secure Backplane

A revolutionary cyber secure pin-less 4Gbit electromagnetic backplane that supports secure controllers, power and I/O modules with scalable single/dual/triple I/O redundancy.



Secure, Programmable I/O

Secure and software programmable I/O including DI / DO / AI / AO / Pulse / HART 7 / Modbus TCP / Modbus RTU / PROFINET / BSAP and more.



Secure Communications

Standards based options including OPC UA / MQTT / Ethernet IP / Serial communications, for secure reliable application and device connectivity.



Secure Power

The SPM.U and SPM.24 provide fused and regulated power through Bedrock's patented BMI to the controller and up to 20 SIO. In addition, they can provide optional loop power for field devices connected to SIO.



Secure Controller

Secure Control & Communication Modules use layers of embedded technology to deliver a new paradigm of control and cyber security designed to lower the cost profile, while significantly improving performance and security. The SCS and SCC are scalable for every application, with support for tens to thousands of I/O points per controller.

More ways that Open Secure Automation saves you money, adds flexibility, and simplifies installation.

OSA[®] ENGINEERING SOFTWARE



The world's only free and secure IEC 61131-3 compliant software platform that includes all the necessary components for engineering and commissioning of automation applications.

OSA[®] REMOTE



Bedrock security and performance in the palm of your hand; for oil and gas, water and wastewater and other remote operations needing 20 or fewer I/O points.

OSA[®] +FLOW



Bring the full suite of Bedrock's OSA[®] cyber security features to your flow computing applications. Every +Flow product is equipped with advanced control and over 30 built-in cyber security technologies coupled with Flow-Cal measurement software.

OSA[®] POWER



Smart standalone field power and back up UPS with Bedrock's patented intrinsic security. Advanced crypto processors, integrated modular redundancy, all-metal construction and IP67 rating are all unique features making these invaluable power supplies compatible with any automation system.

OSA[®] SUPPORT PRODUCTS



I/O conditioning accessories, including a family of Universal Termination Assemblies (UTAs) that provides signal conditioning, isolation or disconnect, single-point power distribution and more, for any field device, signal or voltage.

OSA[®] SUPPORT PRODUCTS



Power and communication cabling accessories, in addition to a single universal I/O cable for all signal types, with versatile and patented 180° rotational knuckle, which relieves stress and simplifies both field wiring and routing.

BEDROCK IN ACTION

OIL & GAS UPSTREAM

Bedrock OSA® Remote is the ultimate IIoT Gateway for the digital oilfield to intrinsically secure the edge to the cloud.



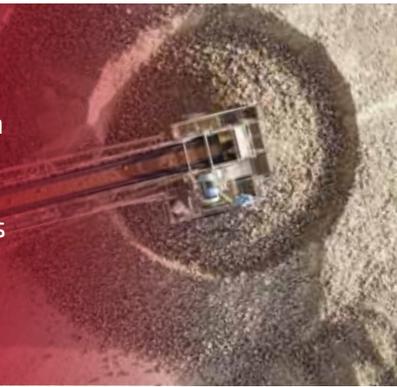
OIL & GAS MIDSTREAM/LACT

Bedrock OSA® +Flow & OSA® Remote +Flow are the only cyber secure solutions for Gas/Liquid Flow Computer applications.



MINING & METALS

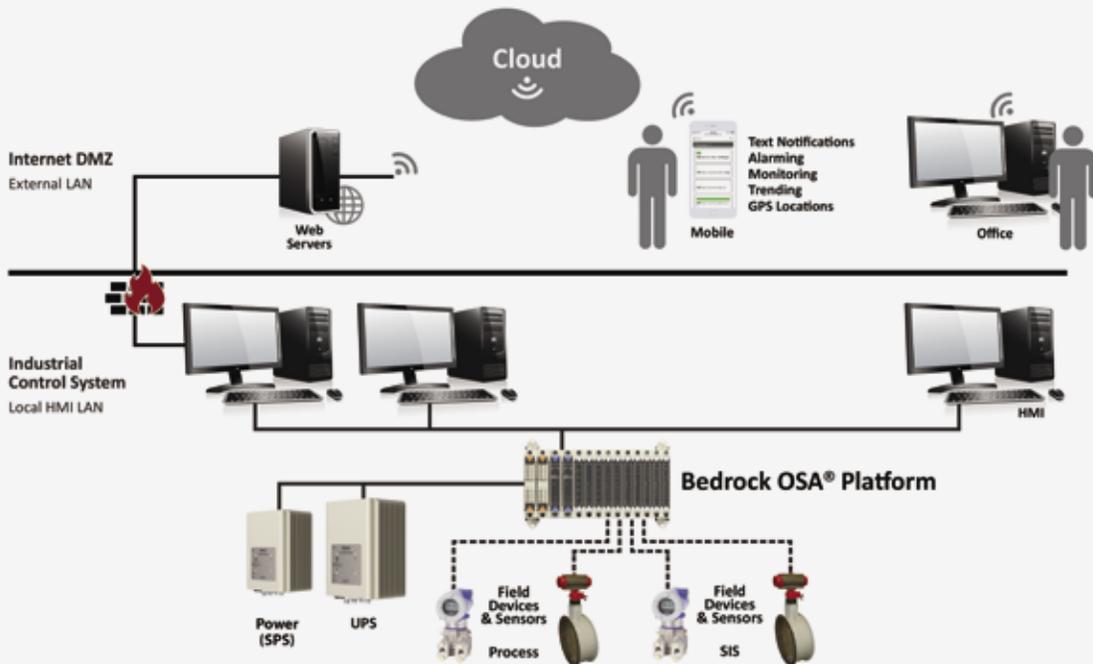
Bedrock OSA® is built with all-metal construction, meets or exceeds today's tough electrical standards & is even EMP rated for the harshest environments.



WATER TREATMENT

Bedrock OSA® provides a suite of over 30 security technologies combined with the free OSA® Engineering Software for the most secure operations with the lowest installation & maintenance costs.

Build on Bedrock®



Open Secure Automation Architecture

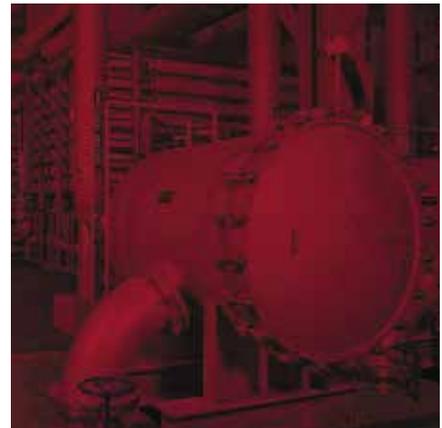
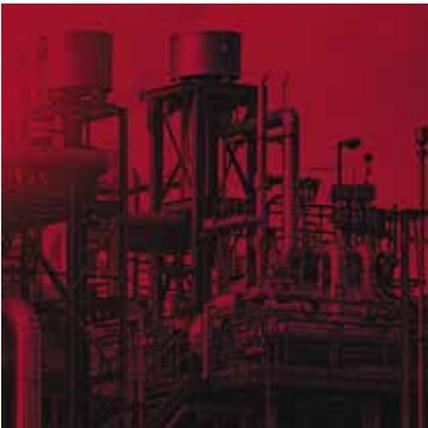
Visit www.bedrockautomation.com for more details on how Bedrock Automation is improving performance and cyber security for critical infrastructure applications.

WORKING TOGETHER

Bedrock is committed to your peace of mind. Rest assured that with Bedrock you are deploying the maximum cyber security available; that you are riding high on the performance curve; and that you are doing so at the lowest total cost of ownership and operation. Plus, get:

- ✓ **Free software** – IEC 61131 – where others charge thousands for their engineering environment, Bedrock provides it at no cost. Visit Bedrockautomation.com and download it now.
- ✓ **Free maintenance** – as with our software, there are no maintenance contracts. We provide the support you need, when you need it.
- ✓ **Free training** – extensive online training videos are available on our website at the School of Bedrock, as well as reasonably priced onsite training.

**To learn more about deploying Bedrock,
contact us at sales@bedrockautomation.com.**



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