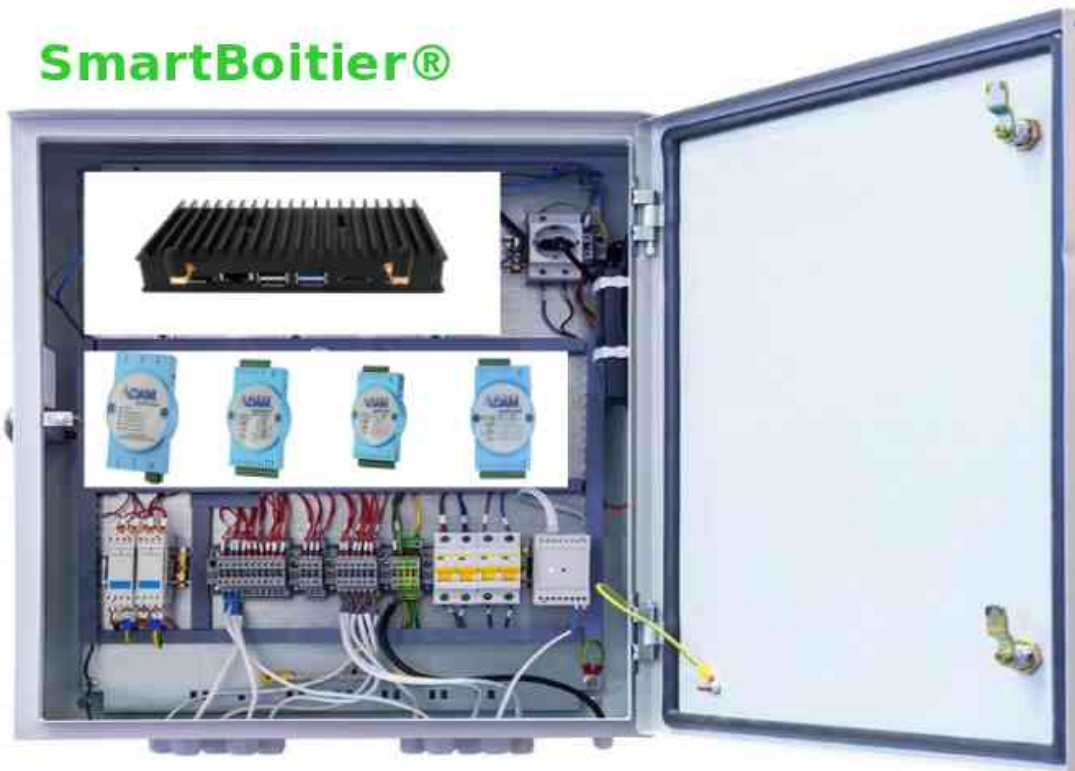




# SmartBoitier®

## Integration and Streaming Made Easy Standardized Edge Deployments

### SmartBoitier®



The **SmartBoitier®** a versatile self-contained control station product designed to simplify deployments of industrial transformation industrial automation, manage IoT/IIoT/Industry 4.0 networks, eliminates the need for custom programming, providing an efficient and non-invasive way to integrate and manage diverse OEM sensors/devices/equipment into a unified network of sensors at the edge.



## Value Delivered Out of the Box

- No Code Plug 'n Play unified (COP) common operating picture across systems and subsystems
- >50% integration cost reduction
- 6X rapid project completion
- Edge (Last mile) data and video via the internet
- Hardware, communications and cloud platform agnostic
- Remote access - configuration and troubleshooting
- Integrates into existing system, processes and specific goals
- Universal connectivity – monitoring and control of devices
- Secure logins & data audit trails
- Automatic data quality checks
- Robust hardware
- Easy to configure
- Client choice of cameras and sensors
- Security at many levels – H/W, Bios, OS, Applications
- SMS and email alerts for critical data alarms
- Integrate out of the box
- Extensive forensics

## A Unified System

For Industry



HVAC



Boilers



Occupancy



Chiller



SmartConnect



Weather & CBRNE



Access Control



Security



Fire Detection and Alarm



The **SmartBoitier®** standardizes IoT edge deployments, thus addressing various digital transformation and edge computing needs to ingest, aggregate and stream sensor data.

**Edge Data Capture and Monitoring/Control:** provides a stand-alone ready-to-use solution for secure data acquisition, storage and monitoring and control at the edge.

**Plug-and-Play Functionality:** No-Code embedded software enables easy integration, secure data capture, aggregation and streaming data to preferred cloud or analytics platform from any sensor, device, equipment, or camera without the need for development.

**Sensor Supplier Agnostic:** freedom to choose the sensors adapted to requirements and needs; use existing **(brown-field)** sensors/devices/equipment/cameras – no need to rip-out and replace; choose new **(green-field)** sensors that best meet the needs, regardless of the brand.

**Easy Integration:** non-invasive deployments by licensed electrician interface with an unlimited number of devices and sensors.

**Scalability and Flexibility:** supports multiple protocols at the same time; smart connect, manage a small number of devices or thousands with capability to rapidly integrate new sensors easily and accommodate a wide range of devices and sensors.

**Reduced costs and integration time:** simplified integration of IoT devices, saving time and money – more than 50% reduced costs, 6X to project completion.

**Simplicity of IoT Network Management:** over intuitive user interface non technical staff can configure devices, set rules and monitor/control performance; no need for in-depth technical skills.

**Remote Access and Real-Time Notifications:** headless, orchestrations, configuration/re-configurations of various solutions and troubleshooting from anywhere/anytime over intuitive and user friendly interface

**Highly Secure:** thorough security at H/W, OS, Applications levels – TMM2.0; SE Linux



## Benefits and use cases:

### 1. Benefits:

- **Intuitive Interface:** The **SmartBoitier®** offers an easy-to-use interface for configuring devices, setting rules, and monitoring performance.
- **Device Management:** Connect and manage various sensors, devices, equipment, cameras, IoT devices seamlessly.
- **Rule Engine:** Create custom rules based on sensor data, time, capturing/storing/streaming frequencies or other conditions.
- **Data Visualization:** Visualize real-time data and historical trends.
- **Security:** Robust security measures to protect your IoT network.

### Smart City Solutions delivered with **SmartBoitier®**

*Building block for Smart Cities Solutions - one **SmartBoitier®** per site*

- Upgrade/Update to Smart Facilities (- Apartment complexes, Offices, Factories, Labs, Warehouses ....)
- Sustainability Programs
- Smart (On Going) Commissioning
- Smart Manufacturing
- Smart Transportation
- Smart Utility
- Smart Agriculture
- Smart Evacuation System and Early Warning
- Public Safety
- Emergency Services (Fire, Hospital, Workplace Safety, Child Care)

### 2. Use Cases:

- **Smart Facilities:** Upgrade and update of facilities using existing electronic resources. A common operating picture to monitor and control energy, environmental and security systems.
- **Industrial Automation:** Monitor and control machinery, optimize processes, and enhance safety.
- **Agriculture:** Easily track soil condition, weather conditions, and crop health.
- **Life and Animal Sciences:** Easily track animal presence, health and environment.
- **Research and Innovation Labs:** Researchers can focus on their work while the easily installed and re-configurable system handles routine tasks.
- **Educational Institutions:** As well as a learning tool, **SmartBoitier®** enhances campus management, allows real-time monitoring environmental factors and safety.



## Technical Specifications

<b>Appliance:</b> No programming, Turnkey, Industrial Edge Gateway Computer	<b>Software:</b> <b>SC-IoTOS®</b> Customized SE Linux Distribution - a no-code embedded software OS designed to ingest, monitor, control, manage and transmit real- time aggregated data from sensors, devices, equipment, cameras	<b>Computer:</b> 12th Generation Intel® Core™ i5 Processors - i5-1235UL TPM2.0 Security Intel® Ethernet, Wireless, 8GB Memory, 250GB Hard Drive or SSD SIM Slot for 5G/4G/3G <b>OR</b> SoC - Intel® Processor N100 quad-core Alder Lake-N processor @ up to 3.4 GHz; (Turbo) with 6MB cache TPM2.0 Security Intel® Ethernet, Wireless, 8GB Memory, 128GB M.2 SATA SSD, upgradeable to 2TB SIM Slot for 5G/4G/3G
<b>I/Os</b>	Total	40 I/O main unit. 40 I/O per Expansion Modules up to 2,500 I/Os
	Digital Sensors	On/off, 1 or 0, true/false Dry Contact: Logic level 0: Close Logic level 1: Open Ground Wet Contact: Logic level 0: 0 ~ 3 VDC Logic level 1: 10 ~ 30 VDC
	Analog Sensors	Input Impedance: > 10 Ω (voltage), 120Ω (current) Input Type: mV, V, mA Input Range: ±150mV, ±500mV, ±1 V, ±5V, ±10V, 0-20mA, 4-20mA Over voltage protection: ±35 VDC
	Digital Output Devices	On/off, 1 or 0, true/false Sink type: Open Collector to 30 V, 100 mA (maximum load)
	Relay Output	Contact rating (Resistive): AC: 120 V @ 0.5 A DC: 30 V @ 1 A
<b>Video</b>	Digital Video	Via IP address
	Analog Video	Analog signal to digital IP video server
<b>Connectivity</b>	Network Connections	Gigabyte Ethernet port(s) WiFi SIM Card Slot for 5G/4G/3G Internet (TCP/IP) connectivity Adapters for other protocols
<b>Electrical</b>	Operating Voltage	Mains Power (120 - 240 V)