



# LEVERAGE YOUR OSP INFRASTRUCTURE'S POWER AND COOLING DATA

Introducing the iO mini - a compact solution designed to seamlessly integrate into outside plant cabinets and small indoor facilities, revolutionizing remote monitoring of power and cooling assets.

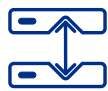
With upcoming LTE and fiber connectivity options, the iO mini will soon extend your reach to previously inaccessible sites, giving you complete visibility and control.

Experience the future of asset monitoring with the powerful iO mini.



All the essential functionalities of the iO Gateway in a more compact design

## FEATURES



MULTI-PROTOCOL GATEWAY



STREAMLINE DATA TRANSPORT



SECURE REMOTE MANAGEMENT PLATFORM



CENTRALIZED ACCESS



UP TO 10X CONNECTED DEVICES



UP TO 250 DATA POINTS

# POWERFUL & COMPACT MULTI-PROTOCOL GATEWAY

## NETWORK CONNECTIVITY

The iO mini provides up to two Ethernet ports, backed by industry-grade security, for seamless connectivity with local smart devices and network or enterprise software. Optional cellular LTE and SFP fiber connections are planned for future release.

## SERIAL CONNECTIVITY

Up to two RS-485 ports simultaneously manage two distinct serial protocols or provide redundancy for a single protocol.

## SECURED CONNECTIVITY

Implementing an iO mini will improve the cybersecurity of critical power and cooling infrastructure by employing SNMPv3's ability to authenticate and encrypt payloads. Implementing LDAP authentication can validate users' identities and access rights. The iO mini can create boundaries between Networks by physically separating the Local Area Network (LAN) and Corporate Network.

## PASSTHROUGH CAPABILITIES

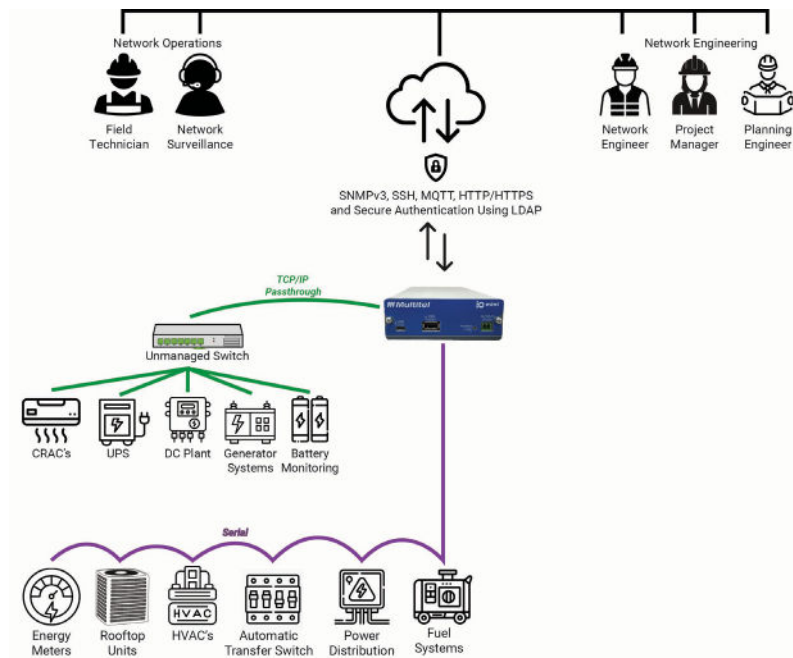
The passthrough features enable users to maintain existing aspects of their smart devices, such as web, console, and file transfer capabilities, even if they are on a local network. Leverage HTTPS Proxy functionality to gain remote access to unsecured HTTP devices using the latest TLS encryption.

## PROTOCOLS

iO mini supports several protocols: HTTP/HTTPS; SNMP get v1, v2, v3; SNMP trap v1, v2, v3; Modbus RTU master/slave; Modbus TCP/IP client; MQTT; SSH; LDAPS; DNS; DHCP; NTP, RADIUS.



## SMART, SMALL, RELIABLE AND IT-SECURED MONITORING TOOLS



# SPECIFICATIONS

## GENERAL SPECIFICATIONS

Operating Input Voltage	-21 to -60 VDC (A feed)
Operating Temperature	-40 to +65°C (-40 to 149 °F)
Operating Humidity	5% to 90% RH Non condensing
Dimensions	123.95 x 117.09 x 38.10 mm (4.88 in. x 4.61 in. x 1.50 in.)
Weight	350g (0.77 lbs.)

## COMMUNICATION / NETWORK INTEGRATION

Serial Ports	Up to 2x RS-485 (2-wire)
Ethernet Ports	1x 1 Gbps, 1x 100 Mbps
USB	1x USB 2.0
USB OTG	1x micro-USB 2.0
Ethernet Protocols	HTTP/HTTPS
Serial Protocols	Modbus RTU (Client/Server)
IP Protocols	Modbus TCP/IP (Client/Server), SNMP Get v1/v2c/v3, SNMP Agent v1, v2c, v3, MQTT
Network Protocols	NTP, DNS, DHCP
Authentication Protocols	LDAP (Client), RADIUS (Client)
Remote Access Protocols	SSH
File Transfer Protocols	SFTP
CPU	1.6 GHz Quad-Core
Memory	2 GB DDR3
Disk	16 GB

## CERTIFICATIONS

Safety	UL 62368-1:2014 Ed.2 CSA C22.2#62368-1:2014 Ed.2
Emissions	FCC Part 15, Subpart B   ICES-003

## WHY CHOOSE iO mini?

In the dynamic landscape of telecommunications, staying connected to your assets has never been more crucial. With our innovative iO mini, you can now monitor and manage your outside plant assets with unparalleled ease and efficiency.

Designed to seamlessly integrate into outside plant cabinets and small inside facilities, our compact device offers a powerful solution for remote asset monitoring. Whether it's monitoring equipment status, tracking environmental conditions, or ensuring security, our telemetry device provides real-time insights to keep your operations running smoothly.

## KEY MARKETS SECTORS



### TELECOMMUNICATIONS



### POWER UTILITIES



### RAILWAYS



### CATV/BROADBAND

**iO mini enables users to improve their existing Outside Plant monitoring solutions, unlocking new levels of efficiency in operations.**

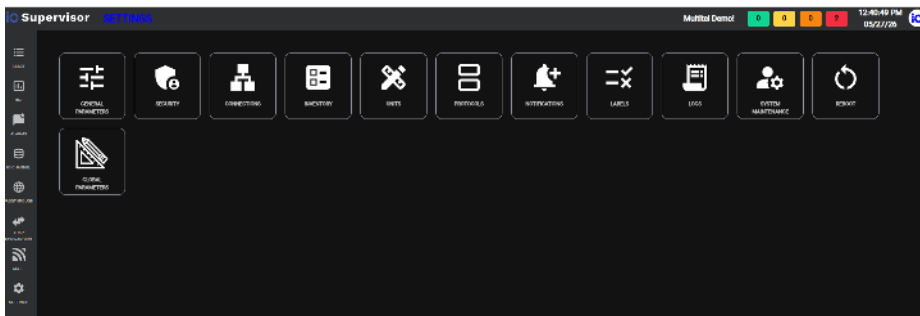
**Data source dashboard**

Status	Asset Name	Communication Protocol	Manufacturer	Asset IP Address	Actions
<span style="color: green;">●</span>	Acarev 2000	Modbus TCP/IP	Acenergy	10.10.100.50	***
<span style="color: green;">●</span>	Alpha Cardex	SNMP	Alpha	10.10.100.60	Web Access ***
<span style="color: green;">●</span>	Cummins Generator	Modbus RTU	Cummins		***
<span style="color: green;">●</span>	LFP1	Modbus RTU	Narada		***
<span style="color: green;">●</span>	LFP2	Modbus RTU	Narada		***
<span style="color: green;">●</span>	Lithium Batteries - Recap	Modbus RTU	Narada		***

**Passthrough**

Name	Description	Protocol	Source Port	Destination IP	Destination Port	Additional Port	Transport Protocol	Special Mode	Action	Status	Web Access
P1	Mirador	HTTP	81001	192.168.1.5	80		TCP	HTTP Proxy	None	<span style="color: blue;">●</span>	Passthrough
P2	Alpha	HTTP	81002	10.10.100.61	80		TCP	None	None	<span style="color: blue;">●</span>	Passthrough
P3	Cardex	HTTP	81000	10.10.100.60	80		TCP	None	None	<span style="color: blue;">●</span>	Passthrough

**Settings interface**



**Contact us today to learn more about how the iO mini can revolutionize your remote asset management strategy!**



**Multitel**  
 3710 Wilfrid Hamel Blvd.  
 Quebec (QC) G1P 2J2  
 Tel 418.847.2255  
 Toll Free 1.888.685.8483  
 info@multitel.com

multitel-inc

Take advantage of the power and performance of our most compact multi-protocol gateway.

Contact us today:  
**multitel.com**

