

# AXON & NEURO



## Davicom AXON & NEURO Series™ Smart I/O Modules with Web, SNMP & Modbus

Davicom introduces two new intelligent products specifically designed for smaller remote telemetry applications. They provide users with autonomous devices for alarm, monitoring & automation functionalities at a very competitive price. Thanks to their SNMP agents, these products are the perfect remote telemetry companions to report to any SNMP Manager, including the Cortex Series. Moreover, their HTML5 web-based interfaces provide an easy-to-operate environment for visualization and configuration of the units.

# AXON

The AXON Series Offers 3 Different Options



AXON 8D  
8 Digital Input  
Interface



AXON 8A  
8 Analog Input  
Interface



AXON 5R  
5 Relay Output  
Interface

Need More I/O?

# NEUR

Combine up to 5 AXON I/O Modules to Create  
an RTU that has up to 55 Configuration Possibilities



# Directly Connect Any Type of Analog or Status Signal and Control External Equipment



Environmental



Security



Level & Pressure



Power

## Analog Inputs

The Axon-8A's flexible analog inputs can accept a wide range of signals. Sensors with various voltage outputs  $\pm(0.5, 2.5, 5, 10, 20, 40 \text{ V})$  or current outputs (4-20 mA), can all be connected to the unit's differential inputs.

## Digital Inputs

The Axon-8D's inputs are available for reading logic levels or wet/dry relay contacts, with programmable active-high or active-low settings.

## Relay Outputs

The Axon-5R's relay outputs can control other on-site equipment. From remotely switching off a faulty device to turning on the generator when a power outage occurs, the unit can take smart decisions to keep your site operating.



## Completely Autonomous with High Level Intelligence

### Build Onboard Automations with Jobs, Schedulers & More!

The AXON/NEURO systems provide automation with decision-making features and commands that go well beyond conventional telemetry systems. Units can, for example, be responsible for automating main/backup switchover and alerting on-call personnel in case of a failure. Engineering staff can then diagnose the problem from the event history log and, using remote measurements, decide on the appropriate course of action.



Jobs



Math Functions



Schedulers

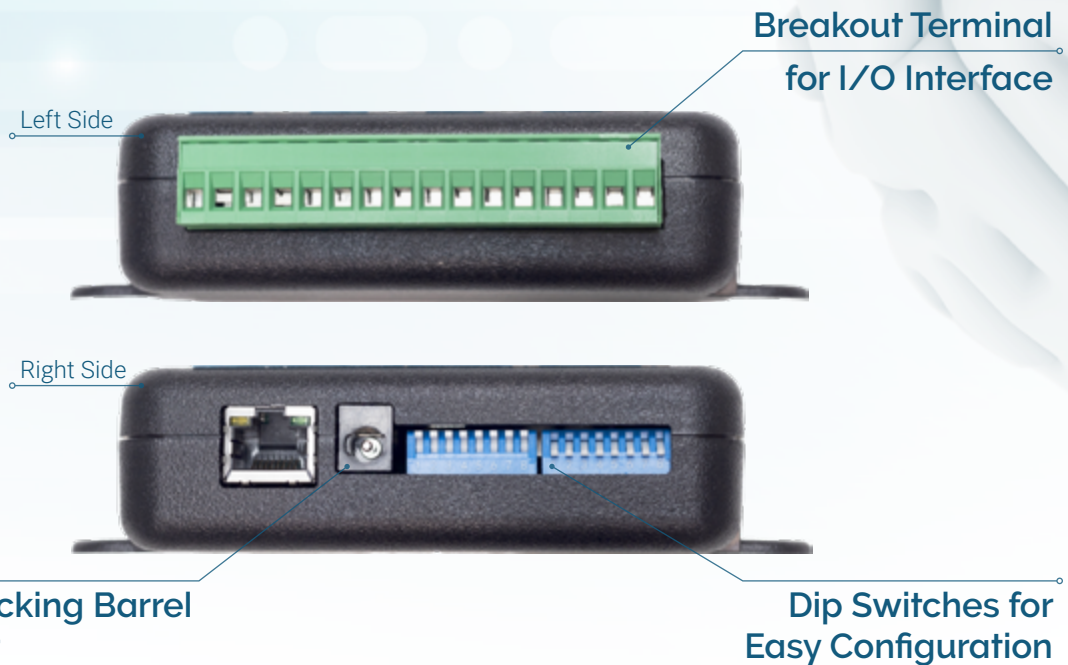


Activity Timers



Up/Down Counters

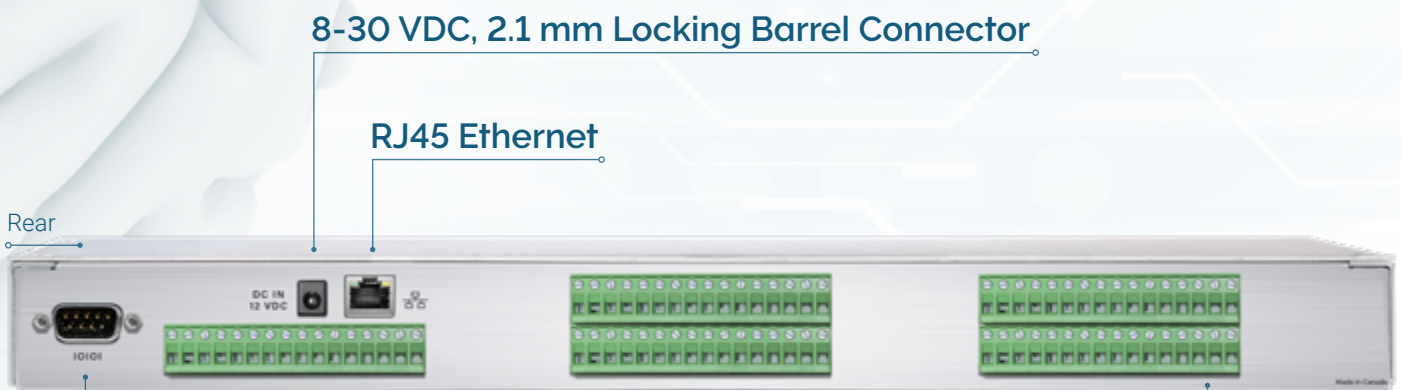
# AXON



# NEUR



Factory Reset Button



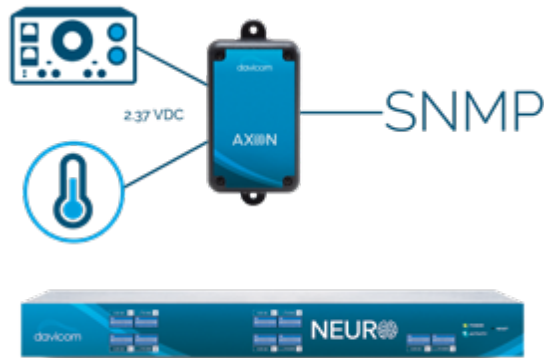
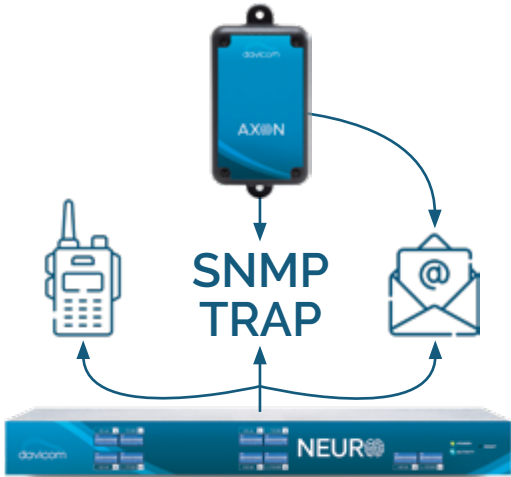
Serial Port for Text Alarms to Compatible Radios

I/O Connectors for Analogs, Digitals or Relays

# Send Alarms via Email, TRAPs/ INFORMs to an SNMP Manager or via Specific Two-Way Radio Serial Data Protocols\*

Alarm notifications can be sent by Email or to an external SNMP Manager via SNMP TRAPs/INFORMs. Up to 5 alarm-call lists can be configured to notify different teams or to differentiate alarm severity.

\*NEURO only, contact Davicom for specific protocols supported.



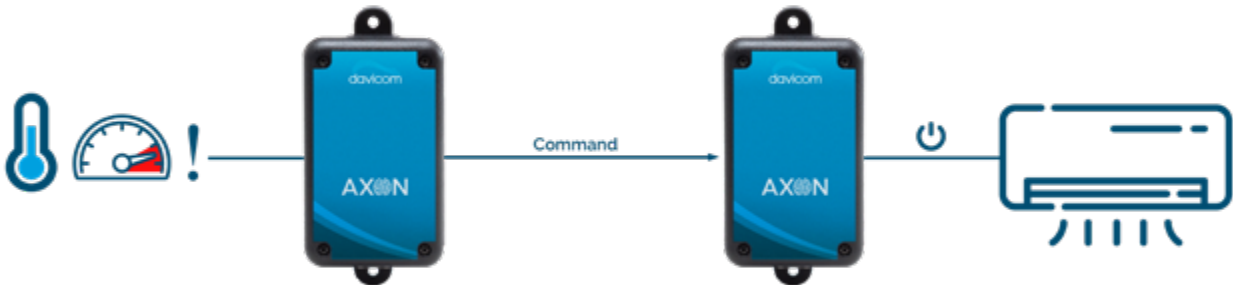
## Complete SNMP v1/v2c/v3 Agent compatible with all SNMP-Based Network Management Systems.

These units have a built-in SNMP agent to allow monitoring and control from a central SNMP manager (including Davicom's CORTEX SERIES). When activated, this agent allows remote SNMP management systems to perform GETs, SETs and to receive TRAPs/INFORMs from the AXON/NEURO units.

This feature has the added benefit of converting readings from non-SNMP sensors or legacy site devices into SNMP-compliant readings.

## Use Remote Commands to Control an AXON/NEURO at a remote location

Say hello to a complete network of interconnected AXONS & NEUROs that are capable of communicating amongst themselves without requiring an external server. Units can send bandwidth-efficient commands to control relays in remote NEURO/AXON-5R modules. Up to 8 commands can be sent to other units and can be triggered either manually or automatically using Virtual ACTIONS or JOBS (State Machines).



# Seamless Integration with the CORTEX Series™



## Use AXONs & NEUROs as CORTEX Unit I/O Expanders

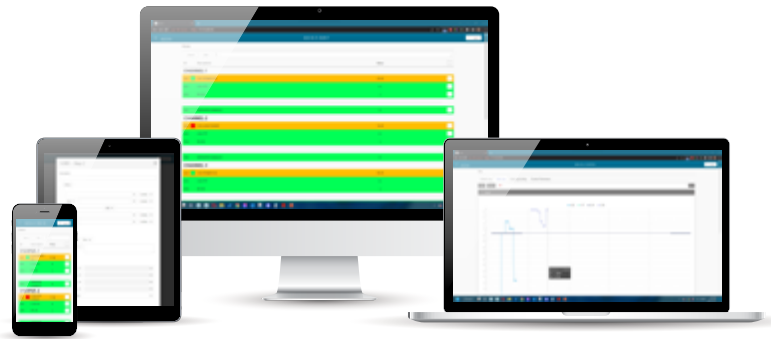
Running out of inputs or outputs on your Cortex units? Use these I/O modules as a cost-effective solution to expand the number of I/O points of a Cortex unit. The Modbus protocol ensures a fast polling rate while integration is achieved at the click of a button.

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## HTML 5 Web GUI for Easy Configuration & Status List View

Clean • Modern • Easy-to-Use

The AXON/NEURO's customizable HTML5-based GUI list view will help you and your system operators/technicians to quickly get a picture of the situation at the remote site. User levels can be configured to grant/restrict access to different users.



### Data Logger & Event Log

Data Loggers can be configured to keep track of sensor readings over time. Use the built in logic of Jobs to start data logging based on logical conditions. Never lose any data and send reports by email periodically or when the buffers are nearing full capacity. (4096 data samples & 1024 events).



### Top-Quality Design for EMC

All Davicom products are developed and tested to operate in high-level electric fields and to resist electrostatic discharges. This is exactly the type of environment you would expect to find near high power transmitters on a mountaintop with a metal tower that is a magnet for lightning!



### Turn Them into Modbus Slaves

Turn any AXON/NEURO device into a Modbus Slave. To ensure fast polling rates, when enabling Modbus mode, the AXON/NEURO units will disable most of their intelligent features. This ensures that the Modbus Master device will not interfere with any other operations.

## AXON/NEURO Comparative Chart

Specifications	AXON	NEURO
Metering (Analog) Inputs	AXON-8A: 8, bipolar, differential, 12 bit resolution, $\pm 0.5$ , $\pm 2.5$ , $\pm 5$ , $\pm 10$ , $\pm 20$ , $\pm 40$ or $-40$ V, 1 M $\Omega$ , 4-20 mA mode.	Up to 40, same specs
Status (Digital) Inputs	AXON-8D: 8 with separate internal or external grounds. Max input : $\pm 65$ V, 10 k $\Omega$ .	Up to 40, same specs
Outputs (Command Relays)	AXON-5R: 5, Form C. 70 VAC @ 0.4 A, 30 VDC @ 2A	Up to 10, same specs
Alarms	Email/SNMP TRAP/INFORM	Email/SNMP TRAP/INFORM/Radio
Alarm Call Lists	5	
Protocols (OSI Layers)	1 : EIA RS-232, 10BASE-T, 100BASE-T 2 : Ethernet , MAC 3 : ARP, ICMP, IPv4 4 : TCP, UDP 5 : Raw Socket	6 : DTLS, TLS 1.2, TLS 1.3, SSL 7 : CoAP over DTLS, DNS, HTTP, HTTPS, Modbus/TCP, SMTP over SSL/TLS, SNMP Agent v1/v2c/v3, SNMP
Jobs	4	
Event schedulers	8	
Math Functions	8	
Remote Commands (Outbound)	8	
Counters	8	
SNMP Agent	Yes (v1/V2c/V3)	
SNMP Manager	No	
Modbus Slave Mode	Yes	
Ethernet ports	1	
Power Supply	8-30 VDC. Typ 110 mA @ 12VDC. Max 190 mA with 5 relays energized @ 12 VDC.	8-30 VDC. Typ 150 mA @ 12VDC. Max 300 mA with 10 relays energized @ 12 VDC.
Serial I/O	No	Yes
Operating Temperature	0° to +70°C	-40° to +70°C
Dimensions	3" x 6" x 2"	19" x 3" x 1.75"
Mounting	Direct wall mount or DIN rail	19" Rack, 1 U
Weight	1 lbs	4 lbs



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