



Alarm • Monitor • Control • Automate

# AXON & NEURON

AVAILABLE  
JUNE/SEPTEMBER  
2023

Smart I/O Modules  
for Smaller Sites & Applications



# SERIES CORTEX

Complete Site Management Solution  
for SNMP, Modbus & GPIO





Why this New Product Line?

The Main Idea Was...



# Offer Better Ways to Expand the Number of I/Os

Use any AXON/NEURO to Expand a Cortex Unit



Modbus

.....





Why not making them Compatible with any  
Remote Controls  
&  
Network Management Softwares (NMS)



# Built-In SNMP Agent

Convert any Readings into SNMP

Legacy Equipment



Sensor

2.37 VDC



NETWORK MANAGEMENT SOFTWARE (NMS)

GET  
Indoor  
Temperature

SET  
Turn On  
Generator

TRAP  
Alarm!

SNMP  
V1/V2c/V3



# SNMP TRAPs? We need to Allow Configuration of Alarms



# We need a Web Server GUI

davicom 2023-04-16 10:59:14

Home Home Settings

See all

ID	Description	Value	
<b>MAIN TX A</b>			
2A1	TX A FWD POWER	998 W	
2A2	TX A REV POWER	4 W	
1F1	TX A VSWR	1	
3D1	TX A RF ON	H	
3D1	TX A OK (NO ALARMS)	L	
<b>CONTROLS</b>			
1B1	TX A RF ON/OFF	Released	
<b>RF SWITCH</b>			
3D6	TX A ON AIR	H	
1B2	TOGGLE TX A/B ON AIR	Released	
<b>BACKUP TX B</b>			
2A3	TX B FWD POWER LOW	0 W	
2A4	TX B REV POWER	0 W	
1F2	TX B VSWR	1	
3D3	TX B RF OFF	L	

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Home Log Job

Settings

Activity Monitoring

Analogue

Counter

Digital

Flag

Math Functions

Ping

Scheduler

OUTPUTS

Relay

Remote Command

UUC

SYSTEM

About

Administration

Alarm Call

Date Time & Location

IP

Site ID

Users

ID	Description	Value	
<b>TX A</b>			
2A1	TX A FWD POWER	998 W	
2A2	TX A REV POWER	4 W	
1F1	TX A VSWR	1	
3D1	TX A RF ON	H	
3D1	TX A OK (NO ALARMS)	L	
<b>TX B</b>			
2A3	TX B FWD POWER LOW	0 W	
2A4	TX B REV POWER	0 W	
1F2	TX B VSWR	1	
3D3	TX B RF OFF	L	

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Analogue

Enable 2A1 - TX A FWD POWER Refresh

Descriptions/Colors

Active TX A FWD POWER LOW Normal TX A FWD POWER

Color #FF0000 Color #00FF00

Sensor Coefficients

$y = A \cdot x^2 + B \cdot x + C$  for  $D = 0$  or  $y = D \cdot \log(x)^2 + B \cdot x + C$

A 0 B 0 C 998 D 0

Measurement Units Voltage Range (V)

W 10

Display positive values only

Low Limit 450 High Limit 60

Delay

Before Action (sec) 1 Before Return To Normal (sec) 0

Conditionally Locked State

Locked State When 3D2 Is Active

Color #FF0000

Alarm Configuration

Signalling On Alarm Signalling On Return To Normal

System Log

1JOB1 - Step 1

Description Test RF CH1

When

1A1 Is Active

OR 1A2 Is Active

AND

AND

Result

Becomes True

Test Expression 1A1 Is Active OR 1A2 Is Active Becomes True

Do

Data Log 1A1

Data Log 1A2

Count Up 1C1

Send UUC NUUC1

Go to Step 1

Apply Changes Cancel



# To Configure Alarms

## SNMP TRAPs to an NMS System

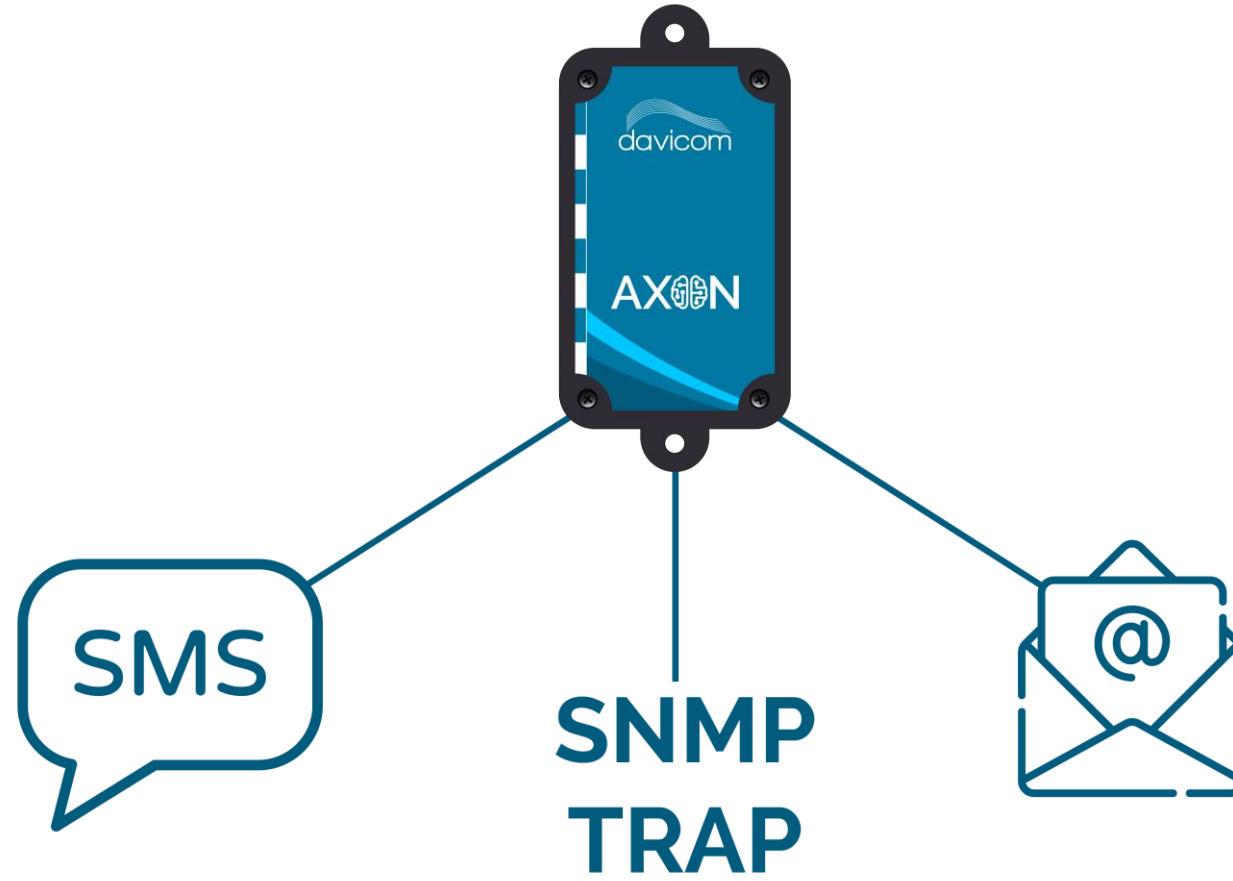


**SNMP  
TRAP**



# To Configure Alarms

EMAIL, SMS or SNMP TRAPs to an NMS System





But we Still need to add the  
Davicom Sauce to this Product line!

# A Virtual Intelligence!

Use Virtual Functions to Build any Type of Automations



# What is a Job?

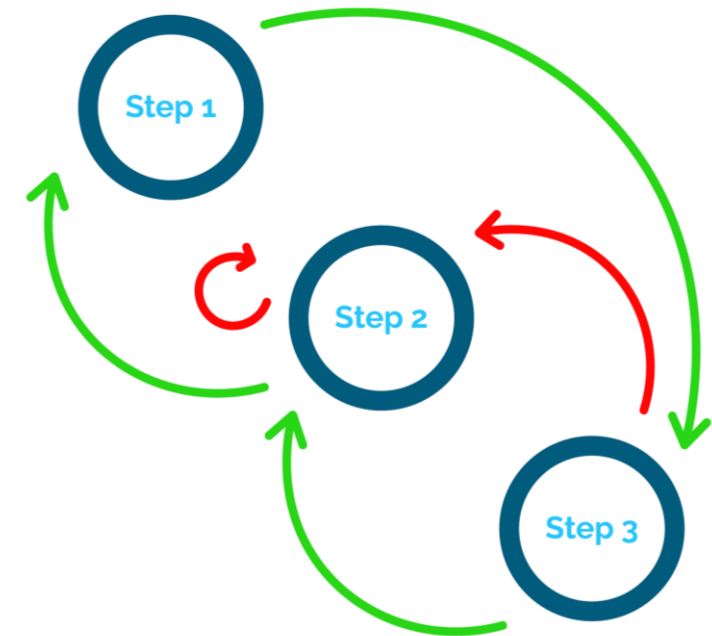
Use Virtual Functions to Build any Type of Automations



WHEN THIS  
HAPPENS...

...DO THAT...

...THEN GO TO





# AXON

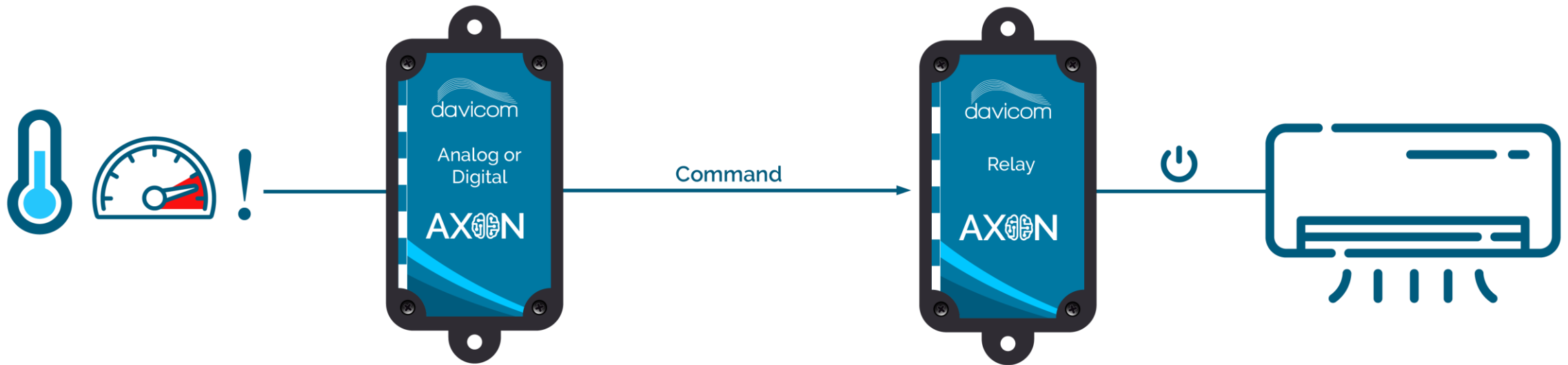
I/O Modules for  
Smaller Sites & Applications



What if we want an Input Module  
to Control a Relay in an AXON-5R?

# Send Unit-to-Unit Commands

Between AXON, NEURO & CORTEX Units

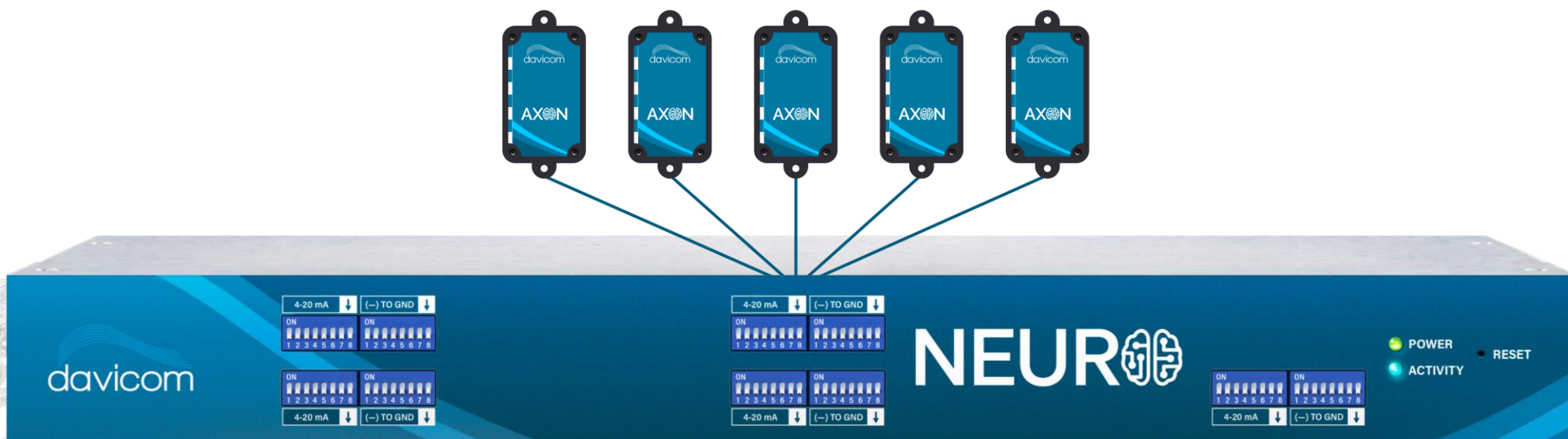


What if we want more than 8 Inputs or 5 Outputs  
for a Location or an Application?



# NEUR

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



16A, 24D

16A, 16D, 5R

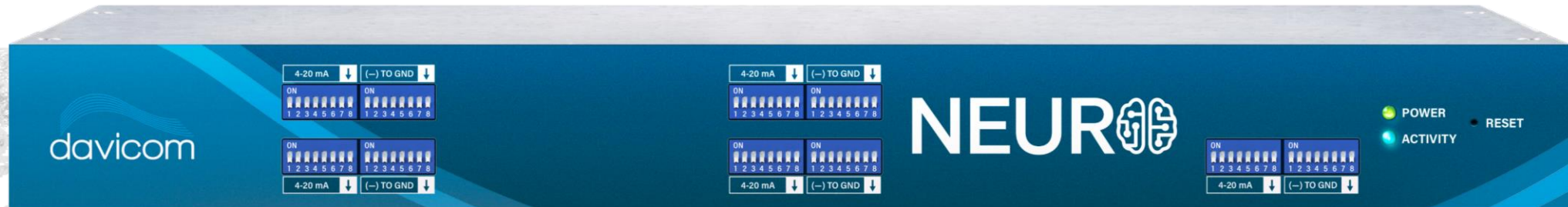
8A, 32D

8A, 16D, 10R



# NEUR<sup>00</sup>

Combine up to 5 AXON I/O Cards Together to Build  
An RTU that fits your requirements



16A, 24D

16A, 16D, 5R

8A, 32D

8A, 16D, 10R



# NEUR

I/O Telemetry Unit With up to  
55 Configuration Possibilities





# AXON & NEURON

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Logout

Home

Home Settings

See all

ID

Description

Value

MAIN TX A

2A1

TX A FWD POWER

998 W

2A2

TX A REV POWER

4 W

1F1

TX A VSWR

1

3D2

TX A RF ON

H

3D1

TX A OK (NO ALARMS)

L

CONTROLS

1R1

TX A RF ON/OFF

Released

RF SWITCH

3D6

TX A ON AIR

H

1R2

TOGGLE TX A/B ON AIR

Released

BACKUP TX B

2A3

TX B FWD POWER LOW

0 W

2A4

TX B REV POWER

0 W

1F2

TX B VSWR

1

3D3

TX B RF OFF

L

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Logout

Home

Log

Job

INPUTS

Activity Monitoring

Analog

Counter

Digital

Flag

Math Functions

Ping

Scheduler

OUTPUTS

Relay

Remote Command

UUC

SYSTEM

About

Administration

Alarm Call

Date Time & Location

IP

Site ID

Users

Settings

Description

Value

MAIN TX A

FWD POWER

998 W

REV POWER

4 W

VSWR

1

RF ON

H

OK (NO ALARMS)

L

RF ON/OFF

Released

CH

ON AIR

H

TOGGLE TX A/B ON AIR

Released

TX B

FWD POWER LOW

0 W

REV POWER

0 W

VSWR

1

RF OFF

L



# AXON & NEURON

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Logout

Analog

☒ Enable

ID 2A1 - TX A FWD POWER

☒ Refresh

Descriptions/Colors

Active

TX A FWD POWER LOW

Color #F50000

Normal

TX A FWD POWER

Color #00FF56

Sensor Coefficients

$y = Ax^2 + Bx + C$  for  $D = 0$ , or  $y = D \log(Ax^2 + Bx + C)$

A 0

B 0

C 998

D 0

Measurement Units

W

Voltage Range (V)

10

☐ Display positive values only

Low Limit

450

☒

High Limit

60

☐

Delay

Before Action (sec)

1

Before Return To Normal (sec)

0

Conditionally Locked State

Locked State When

3D2

Is Active

Color

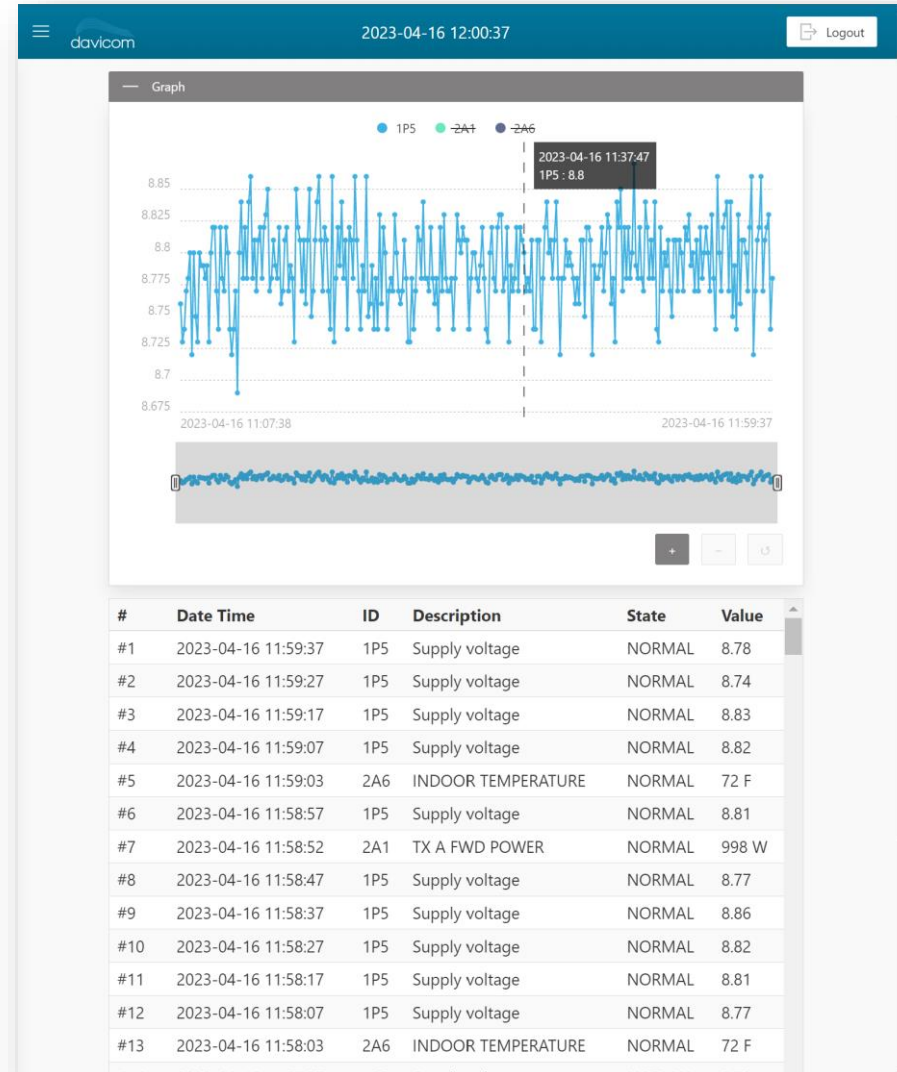
#FFBF00

Alarm Configuration

☒ Signalling On Alarm

☒ Signalling On Return To Normal

☒ System Log



1JOB1 - Step 1

Description

STOP

When

1F1  Is Active

AND  2A7  Is Active

OR

AND   Is Active

Result

Becomes  True

Test Expression (1F1 Is Active AND 2A7 Is Active) Becomes True

Do

Force On  1R4

Do Nothing

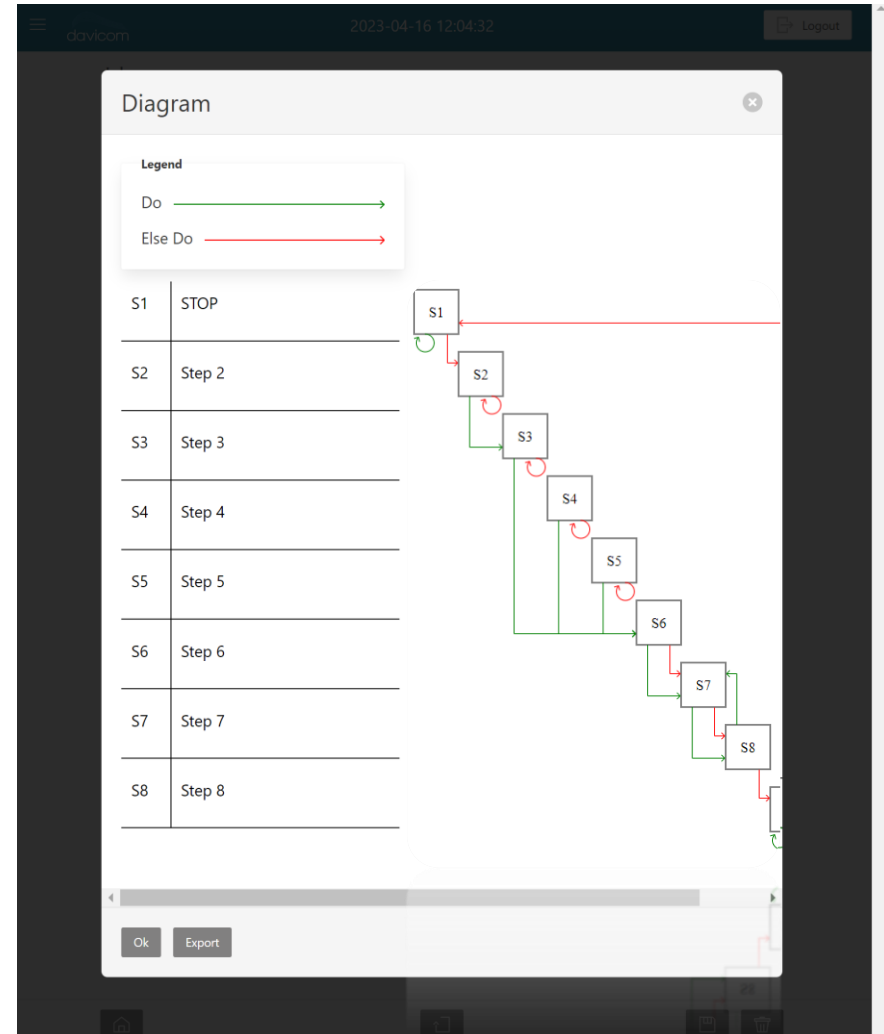
Do Nothing

Do Nothing

Go To STOP

Else Do

Apply Changes Cancel





In Short,



Alarm • Monitor • Control • Automate

# AXON & NEURON

AVAILABLE  
JUNE/SEPTEMBER  
2023

Smart I/O Modules  
for Smaller Sites & Applications



# SERIES CORTEX

Complete Site Management Solution  
for SNMP, Modbus & GPIO





# What Makes the Cortex Series Different?

- ✓ Full Modbus Master
- ✓ Full SNMP Manager
  - ✓ Internet Pings
- ✓ Communication redundancy (IP, Modem (Voice/Calls), Serial)
  - ✓ More Intelligent with More Virtual Functions
    - ✓ More Powerful Workspace Customization
      - ✓ User defined Workspaces
    - ✓ One unit to connect & Visualize everything
- ✓ Can use AXONs & NEUROs as Expansion Modules
  - ✓ Customizable Vocal Alarms
- ✓ Compatible with the Lightning Storm Detector



# AXON & NEURON

How Much Does it Cost!?



# AXION

I/O Modules for  
Smaller Sites & Applications

**580\$ – \$670**





I/O Modules for  
Smaller Sites & Applications

Unit Price  
**\$580**



Unit Price  
**\$670**



Unit Price  
**\$625**

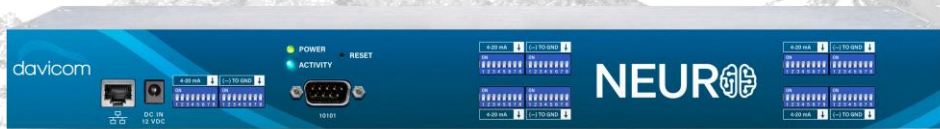




# NEURO

Remote Telemetry Unit  
With up to 55 Configuration Possibilities

NEURO  
Base Unit  
**\$720**



NIO-8D  
Digital I/O Card  
**\$220**

NIO-8A  
Analog I/O Card  
**\$315**

NIO-5R  
Relay I/O Card  
**\$265**



# NEURO

Remote Telemetry Unit  
With up to 55 Configuration Possibilities

Unit Price  
**\$2,010**

16A, 24D

Unit Price  
**\$1,760**

16A, 16D

Unit Price  
**\$1470**

8A, 16D

Unit Price  
**\$2270**

40A



Thank You!

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DEX Support Portal



Davicom Official Website