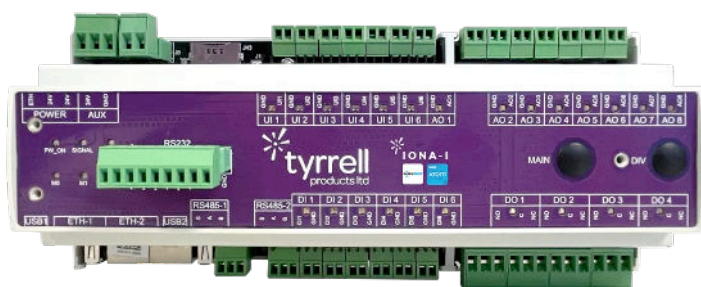# IONA-I - Niagara 4 Controller

IONA-I Niagara 4

niagara⁴

Description:

- IONA-I is an official Tridium portability device powered by Niagara 4. Designed for applications in OEM plant control, IoT deployments, smart buildings and edge to cloud analytics. The Controller comprises a complete set of onboard IO, wired & wireless interfaces. It provides easy integration and powerful interfaces based on Tridium Niagara 4.

- Power on to Station Running in as little as 40 seconds
- Niagara 4.13 for full control & integrated BMS functionality
- Integrated IO (6 UI / 6 DI / 4 DO / 8 AO)
- 2x Ethernet, 3x RS485 & 1x RS232 connectivity
- Integrated cellular 4G Modem
- Up to 2x faster than existing Niagara based controllers

Specification

Comms	2x Ethernet
	2x RS485
	1x RS485 eBMSIO
	1x RS232
I/O	6x Universal Inputs
	(0-10v / 4-20mA / NTC / Monitor / DI / Pulse)
	6x Digital Inputs
	(DI / Pulse Count)
	4x Digital Output
	(Max 5A / 230v)
	8x Analogue Output
	(0-10v / 20mA Max / No Relay Support)
	IO Points Consume 1x Global Point License
Cellular Option	Quectel EG25-G (Cat 4)
	Worldwide LTE
Power	24v DC
Temperature	0°C to 50°C
Dimensions	215 x 90 x 80mm
Weight	<500g

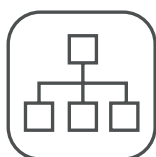| Tech Specs	Intel Elkhart Lake Dual Core
	2x 1.5 GHz
	4GB DDR4-3200 RAM
	32GB eMMC Storage
	(22GB Free Space)
OS	Debian 11
Niagara 4	N4.10.7
	N4.13.2
Point License	100 Points
	250 Points
	500 Points
	1,250 Points
	5,000 Points
	10,000 Points
	Upgrades available from 50 Points
	12 Months Software Maintenance
Performance	Power on to Platform Access: 30s
	Power on to Station Access: 40s

Interfaces

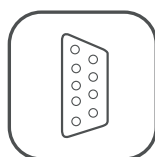| N4	Powered by Niagara 4 Official Tridium Portability Device
	Integrated IO - 24 Points 6x UI / 4x DI / 4x DO / 8x AO
	2 x RS485 Ports 1x RS485 (eBMS IO Connector)
	1 x RS232 Port
	Ethernet 1 (10 / 100 Mbps) Ethernet 2 (10 / 100 / 1000 Mbps)
4G 3G/2G	Cellular Modem - 4G Ready Option Card
S	Tyrrell Analytics Ready

Connectors

	2 x RJ45: Ethernet (Independent Addressing)
	1x RS232 Terminal Connector
	2x RS485 Terminal (3 Pin)
	1x RS485 Edge Connector (eBMS IO)
	24v AC / DC Supply Aux 24v DC Output only available on AC Supply
	Full Size SIM Socket
	2x SMA Female Connectors When cellular card option selected

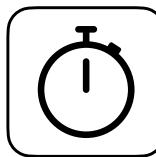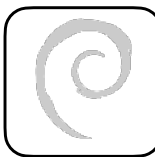| 4G 3G/2G				N4
Cellular	2x Ethernet	RS485 / RS232	I / O	Niagara 4

DIN Rail				S
DIN Rail	High Capacity	Debian 11	Future Proof	Tyrrell Analytics Ready