ION8-1324

A remote I/O unit with its own PLC and PID that carries signals of a rotating section to the other side without cables.

On moving machines such as stranding and buncher lines, it mirrors your inputs and outputs between two points without running cables, and runs local logic and control. A web browser is all you need to set it up. It is in field use on buncher machines.

Cable & wire machinery automation since 2001 · electronics & automation since 1994

Why ION8-1324?

Wireless mirroring

Inputs are passed to the outputs of the paired unit and its inputs to this unit's outputs. No PLC needed.

Built-in PLC and PID

Write PLC programs in the browser using a command list (IL) and regulate speed, temperature or tension with 4 independent PID loops.

Install-free web interface

Monitoring, setup and commissioning from the browser of a phone, tablet or computer. No software to install.

Program state kept

The program keeps its last run/stop state; a stopped program starts stopped after a power interruption.

Wireless update

The device's entire software is updated wirelessly in a single step, without removal.

No lost pulses

With the “High-speed sensor” input type, counter pulses are not lost while being carried to the other side.

Input / output capacity

8	4	8	4
DI · digital inputs	AI · analog inputs	DO · digital outputs	AO · analog outputs 0–10 V

24 channels in total, 32 signal terminals. Encoder, counter and PWM functions share these channels and do not add more.

Remote I/O mirroring

Unit A ⇄ **Unit B**

inputs → outputs
outputs ← inputs

~33 ms	~28 ms	~27 ms	10 ms
Range mode, typical latency	Fast mode, typical latency	Very fast mode, typical latency	Stable-level filter on dry-contact inputs

Wireless link modes: Range (default), Balanced, Fast, Very fast. The mode is selected in the web interface, which lists the advantages and drawbacks of each option. Latency values are typical and vary with the environment.

Built-in PLC and PID

- Write, run and stop PLC programs from the browser with the command-list (IL) editor.
- The program keeps its last run/stop state; a stopped program starts stopped after a power interruption.
- 4 independent PID loops that run apart from the PLC program; settings are stored permanently.
- PWM with adjustable frequency, pulse/direction output and a 0–10 V drive reference.

Install-free web interface

- The device opens its own wireless network: ION8_1324_XXXXXX (XXXXXX = 6 characters unique to the device).
- Connect and type http://192.168.4.1 in the browser; no extra software is needed.
- A live connection indicator shows at once when access is lost; the build signature is shown on screen.

Applications

- Inputs and outputs of the rotating section on stranding and buncher machines
- Length, speed and product counting with an encoder on drawing, take-up and spooling lines
- Pulse/direction command to an external step drive, 0–10 V speed reference to a drive
- Distributed I/O where cabling is impractical or points move frequently

Technical summary

Model	**ION8-1324**
Digital inputs / outputs	**8 / 8**
Analog inputs / outputs	**4 / 4 (outputs 0–10 V)**
Total channels / signal terminals	**24 / 32**
Built-in PLC / PID	**Command list (IL) / 4 PID loops**
Remote I/O latency (typical)	**~33 ms Range, ~28 ms Fast, ~27 ms Very fast**
Configuration and update	**Browser, wireless**

Let us define the right configuration for your site together. We have worked in cable & wire machinery automation since 2001 and in electronics & automation since 1994; ION8 is designed for cable machines and runs at many cable plants.

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