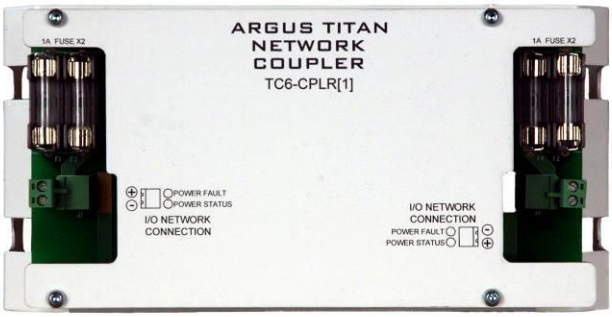
Passive Coupler for RCP

The Passive Coupler isolates powered segments of I/O device communication networks. The Passive Coupler for RCP consists of a Passive Coupler board on a relay control panel mount for installation in Titan combination panels.

Applications



Passive Couplers are conveniently configured to power one I/O network segment and provide power and lightning transient isolation in one easy to install package. Only the I/O network communications signal passes through the Passive Coupler device unchanged.

Total segment length is limited by signal degradation and power losses in the communications cable. Argus engineers normally evaluate these limitations during the system design process.

A Passive Coupler Module (TC-PASC-1.3/C) is also available. It consists of a Passive Network Coupler Board, an Argus Titan I/O Network Power supply, and a 24-volt transformer in a white aluminum powered-coated enclosure.

Alternatives

An I/O Repeater (**TC-IORE**) should be used in place of Passive Couplers if I/O network branching is required, or to regenerate communications signals in applications with long wiring runs or high electrical noise. The I/O Repeater is a drop-in replacement of the Passive Coupler to extend the device communications wiring length beyond 300 meters.

Features

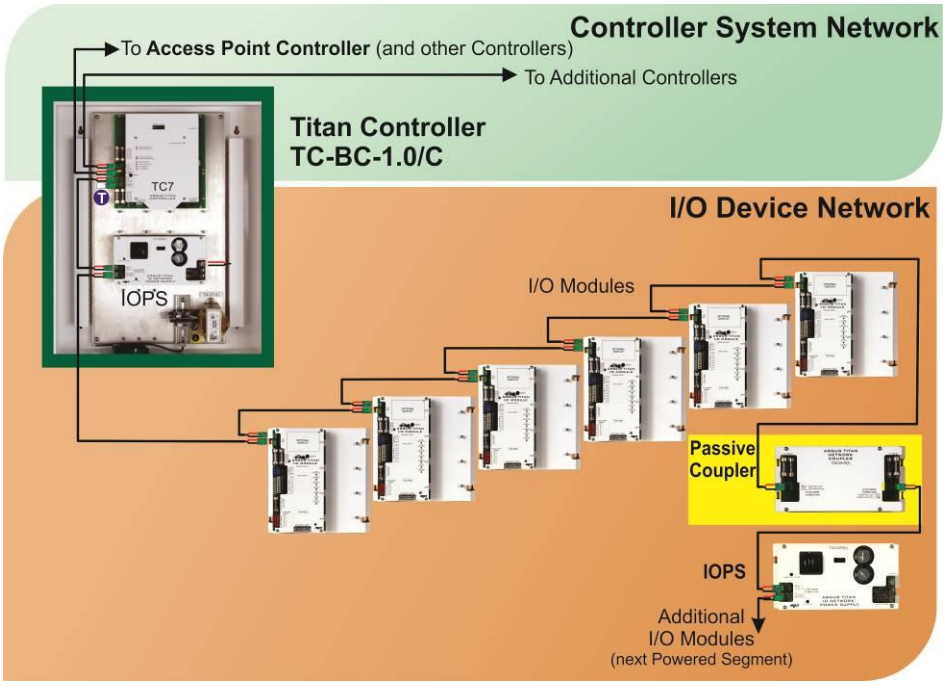
- Fused Lightning protection circuits on each side of the Passive Coupler.
- Completely passive: no power supply required.

PHONE: 604-538-3531 or 1-888-667-2091 (Canada and the US) - **FAX:** 604-538-4728 - **EMAIL:** argus@arguscontrols.com

Specifications

Dimensions	4.5” x 9” x 3” (L x W x T)
Power Requirement	Not powered.
Maximum Network Segment Distance	Typically less than 300 meters. Subject to some signal degradation. Substitute with active repeater if a problem.
I/O Device Network Cable	Argus part number: CAB- 2C18G/TITAN, West Penn Wire - Aquaseal AQ224, 2-conductor, 18-gauge cable, suitable for outdoor use (direct burial), indoor trays, moisture & UV resistant. NO SUBSTITUTIONS – USE OF THIS EXACT WIRE IS CRITICAL FOR PROPER NETWORK COMMUNICATION

Wiring Details



Typical placement of a Passive Coupler on an I/O Communications Network

*The **I/O Modules** in the illustration form an isolated **Powered Segment**. They are being powered by the **IOPS** (I/O Power Supply) located with the **Titan Controller**. The **Passive Coupler** (shown on the yellow background) is used to isolate the power between each IOPS.*

***Example I/O Network Configuration**: Each I/O Network is custom engineered to suit the physical layout of the controlled applications and the distances spanned. For installation, refer to the custom drawings supplied with the control system.*

Additional Information

For more information, please contact Argus.

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