

System Network Repeater Module

The System Network Repeater provides power and signal regeneration for system network communications. It also facilitates network branching and provides isolation for each independently powered segment of the system network. This module consists of a System Network Repeater board mounted in a white aluminum enclosure and a System Network Power Supply that is to be connected to an adjacent Controller.



Applications



The System Network Repeater is used to regenerate the digital communications signal on system network wire runs more than 300 meters and whenever a branch in the network wiring is required.

System Network Repeaters are also used to segregate the System Network into powered segments, with the repeaters in each segment powered by a separate System Network Power Supply. The System Network Repeater provides power isolation between the powered segments (see the illustration on the next page).

The System Network Repeater for RCP (part number TC-SNRE-RCP) is also available, consisting of an SNRE board on a mounting plate and a System Network Power Supply (SNPS) that connects to an adjacent Controller.

Alternatives

None Available.

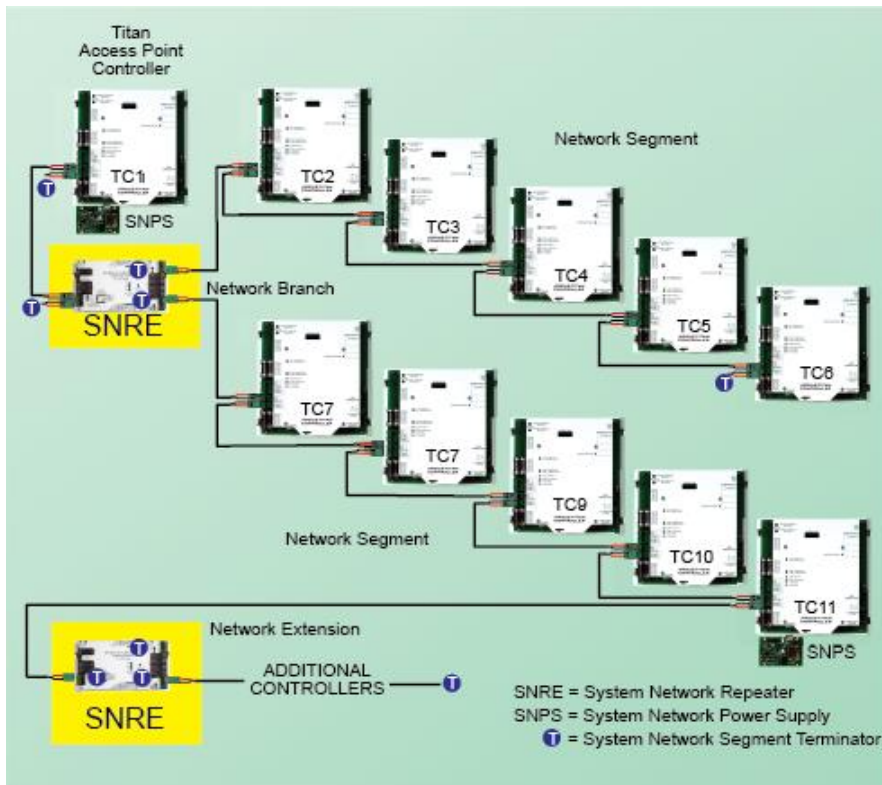
Features

- 3-Port design accommodates free topology network branching for ease of wiring.
- Modules are powered by Network power on Port A. No requirement for supplementary power.
- EMI Choke – reduces interference generated by devices emitting high frequency 'noise'
- LED status lights - indicate proper wiring and network operation.
- Complete digital re-construction of degraded signals, allowing very long networks with many in-line repeaters with no loss of performance.
- Up to nine repeaters may be connected in series, creating network lengths of many kilometers.
- Network terminator connections for installation at the ends of network segments
- Built to UL 508A electrical standards.
- NEMA/UL rated enclosure, suitable for indoor mounting, providing protection against moisture, dust & dripping liquids

Specifications

Enclosure	Dimensions: 12.75" x 14.25" x 4.5" NEMA4/4X, CSA, CUL3R/4/4X/12 approved. *We recommend following local electrical codes as applicable. Modular quarter-turn latches are included with an option to swap these out for key lock and non-key lock handles.
Power Requirement	Power for the module is normally provided via the System Network Power Supply on the powered segment that is connected to Port A . An alternative local power source (12-30 VDC >100mA) must be supplied if Port A is not used.
Maximum Network Segment Distance	Limited by I ² R power losses (voltage drop) and signal degradation (up to 1500 meters per segment).
System 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 System Network Repeaters on a Multi-Controller Titan System.

The illustration shows one repeater used to create a network branch and another used to extend a portion of the network beyond 300 meters. Power for repeaters is supplied by connection of a System Network Power Supply to a controller connected to the 'A' port on the repeater.

Network wiring layouts are custom engineered to accommodate the physical location, the control applications, and the distances spanned. For installation, always refer to the custom wiring diagrams supplied with each system.

Additional Information

For more information, please contact Argus.

