

cnReach™ High-Availability Communications Module

Dual-radio solution provides hot standby and active failover capabilities eliminating maintenance window downtime and unplanned truck rolls.



Cambium Network's cnReach IIoT solutions are deployed for mission-critical applications in industries such as Oil/Gas, Water, Electric Utilities, Rail and Mining. These operators depend on their communications infrastructure to be always-on as they control and monitor processes spread over large geographic areas. With the cnReach High-Availability Communications Module, the system can automatically detect radio or power supply failures and switch to a backup automatically with minimal loss of service. When performing maintenance operations like firmware upgrades, the network isn't interrupted as the hot standby unit can be activated for the maintenance window.

- Automatically monitors Ethernet and radio connectivity to detect communications interruption.
- Dual-radio, dual power supply hot standby and hot-swappable configuration uses same radios as field network reducing spares holding. Radios and power supplies accessible from removable top panel and slide out rails.
- Trigger hot standby switchover automatically or manually (local or remote).
- Front-panel display for monitoring status and controlling cutover.
- Rack-mountable with passive cooling (no fans).

Models

NB-N502900A-US	cnReach HA Comms Module, 900 MHz	NB-N502900A-AU	cnReach HA Comms Module, 900 MHz AU/NZ
NB-N502700A-US	cnReach HA Comms Module, 700 MHz		
NB-N502450A-US	cnReach HA Comms Module, 450 MHz	NB-N502450A-EU	cnReach HA Comms Module, 450 MHz ETSI RED
NB-N502220A-US	cnReach HA Comms Module, 220 MHz		
NB-N502001A-GL	cnReach HA Comms Module, AC Supply		
NB-N502002A-GL	cnReach HA Comms Module, 12 VDC Supply		

SPECIFICATIONS

GENERAL

Radio Frequencies	Available for 900 MHz, 700 MHz, 450 MHz and 220 MHz cnReach configurations
Power Supplies	Ships with one AC supply and one DC supply DC Supply: 9-32 VDC AC Supply: 100-240 VAC Hot-swappable and interchangeable for dual AC or dual DC configurations with spare supplies ordered separately
Front-panel Connectors	Two RJ-45 Ethernet ports (10/100); Two RJ-45 Serial Ports; 1 Alarm relay output; 1 pps input (for synchronization)
Rear-panel Connectors	N-type connector for active antenna; N-type connector for dummy load ; AC power input; DC power input; Protective Earth ground stud
Front-panel Display and Controls	244 x 68 bit backlit display readable in sunlight with trans-reflective illuminated control buttons for monitoring status and selecting active/backup radios.

PHYSICAL

Dimensions	Width: 19" Rack-Mountable Height: 3U standard rack space; 5.22" Depth: 17" front panel to back of N-type connectors on rear; 18.5" including front handles; 21" from handles to back of RF load Unit slides out 22" to the front for top access to hot-standby radios and power supplies
Weight	21.5 lbs. (9.8 kg)

ENVIRONMENTAL

Operating Temperature	-40F to +149F (-40C to +65C)
Humidity	95% operating humidity @ 40C non-condensing

WHAT'S INCLUDED

HA Comms Module	<ul style="list-style-type: none">• rack-mount assembly with integrated slide-out rails and LCD front-panel• Two cnReach single radio modules with the selected frequency band• RF dummy load to sink RF power from inactive radio• Integrated Ethernet switch and supervisory hardware to manage automatic failover of Ethernet and Serial traffic
Power Supplies sold separately (2 required; any combination)	<ul style="list-style-type: none">• AC Power Supply• 12 VDC Power Supply