

# 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<br>DC Supply: 9-32 VDC<br>AC Supply: 100-240 VAC<br>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 ;<br>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<br>Height: 3U standard rack space; 5.22"<br>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<br>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"><li>• rack-mount assembly with integrated slide-out rails and LCD front-panel</li><li>• Two cnReach single radio modules with the selected frequency band</li><li>• RF dummy load to sink RF power from inactive radio</li><li>• Integrated Ethernet switch and supervisory hardware to manage automatic failover of Ethernet and Serial traffic</li></ul> |
| Power Supplies sold separately (2 required; any combination) | <ul style="list-style-type: none"><li>• AC Power Supply</li><li>• 12 VDC Power Supply</li></ul>  |