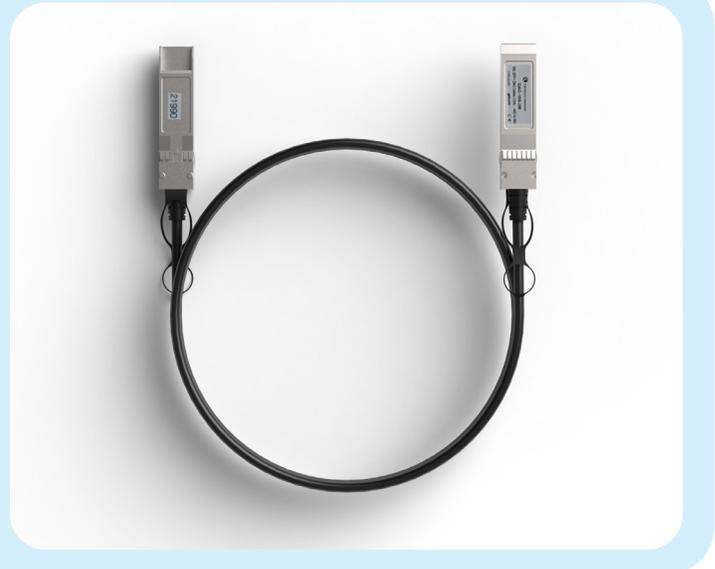


# Direct Attach Copper Cable (DAC)

## QUICK LOOK:

The Direct Attach Copper Cable (DAC) makes it easier, less expensive and more reliable to deploy cnWave radios 'back-to-back', eliminating the need for separate SFP modules and cable terminations. The DAC cable can also be used for connecting distribution switches to co-located core switches. The Cambium DAC cable delivers rates up to 10 Gbps, is two meters long and, importantly for outdoor applications, operates from -40°C to +85°C.



### Benefits of using the DAC cable:

1. Eliminates the need to buy two SFP+ transceivers and a compatible optical cable, resulting in reduced inventory management.
2. DAC cables are factory terminated and ensure watertight sealing
3. Prevents installer errors when terminating optical cables to SFP+ transceivers.
4. The overall cost of using the DAC cable solution is much lower than individually buying the SFP+ transceivers and optical cables.

### DAC use cases:

- Connecting a 60 GHz cnwave™ V3000-to-V3000 backhauled link
- Connecting a 60 GHz cnWave™ V5000 backhauled by V3000
- Connecting a Distribution layer switch to a core switch

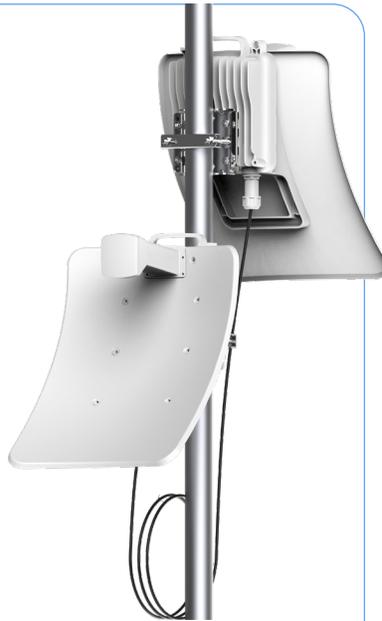
**Note:** The recommended Cable gland to be used with the DAC cable for 60 GHz cnWave products is Part #: C000000L176A-Cable Gland for 6mm cable, M25

### Specifications

|                              |  |
|------------------------------|--|
| <b>Model Number</b>          | DAC-10G-2m   |
| <b>Data rate</b>             | 10.3125 Gbps   |
| <b>Cable Type</b>            | Twinax Copper Cable – Passive  |
| <b>Connector Type</b>        | SFP+ to SFP+   |
| <b>Cable Jacket</b>          | PVC  |
| <b>Conductor diameter</b>    | 30 AWG   |
| <b>Cable Diameter</b>        | 4.5mm to 6.5mm   |
| <b>Bend Radius</b>           | 22.5mm to 32.5mm   |
| <b>Length</b>                | 2m   |
| <b>Standard</b>              | 10G Ethernet IEEE 802.3ae; SFF-8341 compliant EEPROM: SFF-8472 compliant   |
| <b>Operating Temperature</b> | -40°C to +85°C   |
| <b>UV Rating</b>             | UV resistant tested as per UL 2556   |
| <b>IP Rating</b>             | IP67 (only cable)  |
| <b>Regulatory</b>            | IEC 61000-4-2 level 4<br>FCC CFR 47 Part 15 class B<br>EN55032 Class B<br>IEC 61000-4-3<br>ROHS<br>UL 62368-2<br>UL 60950-22 |

## Direct Attach Copper Cable (DAC)

### Connecting a V3000-to-V3000 backhauled link



The 60 GHz cnWave V3000 can achieve an aggregate speed of up to 3.6 Gbps. Deploying a multi-hop point-to-point link connecting two back-to-back V3000s would typically require using the 10 Gig SFP+ interfaces to ensure the link capacity is not reduced due to the physical layer restrictions of 1 Gigabit Ethernet. Instead of using two SFP+ transceivers and an optical cable, we can use the DAC-10G-2m cable to backhaul the traffic.

### Connecting a Distribution layer switch to a core switch

Distribution layer switches pass large volumes of network traffic to core switches. To prevent the distribution switches from being a bottleneck, we can use the DAC-10G-2M cable to connect the distribution layer switch to the core switch and provide a 10 Gigabit pipe for the network traffic.

### Connecting a V5000 backhauled by a Point-to-Point V3000 link



When setting up point-to-multipoint links with the 60 GHz cnWave V5000 as a Distribution node, if the fibre PoP is not available near the V5000, a V3000 to V3000 backhaul point-to-point link is setup. For connecting the V3000 to the V5000, the DAC-10G-2m cable is recommended.

#### ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.