



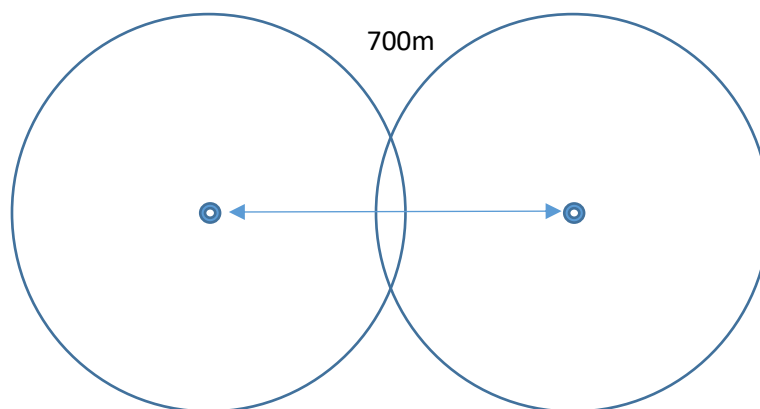
## HM-O-1001 - hyMesh™ Node with Omni Antenna

### Description:

- Compact, rugged, weatherproof hyMesh™ wireless communication node for getting your internet where you need it on or off your site.
- Uses an integrated omnidirectional antenna to communicate with other nodes. No need to aim or optimize the antenna, just mount it, connect it, and let it mesh.

### Application:

- Connects to your internet router/modem and acts as a gateway from your internet service provider to other hyMesh™ nodes;
- Can be connected to a Wi-Fi access point (via an Ethernet switch or router)
- Can act as a high speed wireless relay between two or more adjacent nodes, when a local Wi-Fi access point isn't required,
- Can provide an Ethernet access point for another IP device, such as a surveillance camera.



Omni Antenna to Omni Antenna Coverage Pattern Diagram



**Installation Considerations:**

- Omnidirectional antenna provides 700m line of site connectivity to another hyMesh™ Omni node in any direction.
- One (and only one) hyMesh™ Node in the network must be connected to the Internet Router/Modem, normally located at the main residence. This is the Gateway Node.
- Each Node is powered by PoE (Power over Ethernet) via CAT5e Ethernet cable. A 110VAC/15VDC passive PoE Adapter with two ports, LAN and POE, is supplied with each unit:

LAN Port: The LAN port may be connected to either:

- a) The Internet router or IP addressable LAN device when used with a Gateway Node;
- b) A local Wi-Fi Access Point when used as a network Node; or
- c) An IP device such as a surveillance camera.

POE Port: The POE Port must be connected to the hyMesh™ Node to supply power.

**Specifications:**

|                                 |   |
|---------------------------------|---|
| hyMesh™ Firmware                | 4.8.1 (June 8 2016)                         |
| Networking interface            | 1 x 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet |
| Wireless Approvals              | FCC Part 15.247, IC RS210, CE               |
| Dimensions                      | 17"x1.6" / 430mm x 40mm                     |
| Weight                          | 1.05lb / 475g                               |
| Enclosure                       | Aluminum                                    |
| Operating Frequency             | 5745MHz-5825MHz                             |
| Power Method                    | Passive PoE<br>(Pairs 4, 5+; 7, 8 Return)   |
| Power Supply                    | 15V 12W PoE Adapter Included                |
| Avg Power Consumption           | 2W  |
| Antenna Gain                    | 4dBi  |
| Antenna Polarization            | Vertical                                    |
| Antenna Frequency               | 4900MHz - 5850MHz                           |
| Vertical / Horizontal Beamwidth | 42° / 360°                                  |
| VSWR                            | <1.8:1 avg.                                 |

5.8 GHz Omni Antenna Gain Pattern

