

# MLTG-360

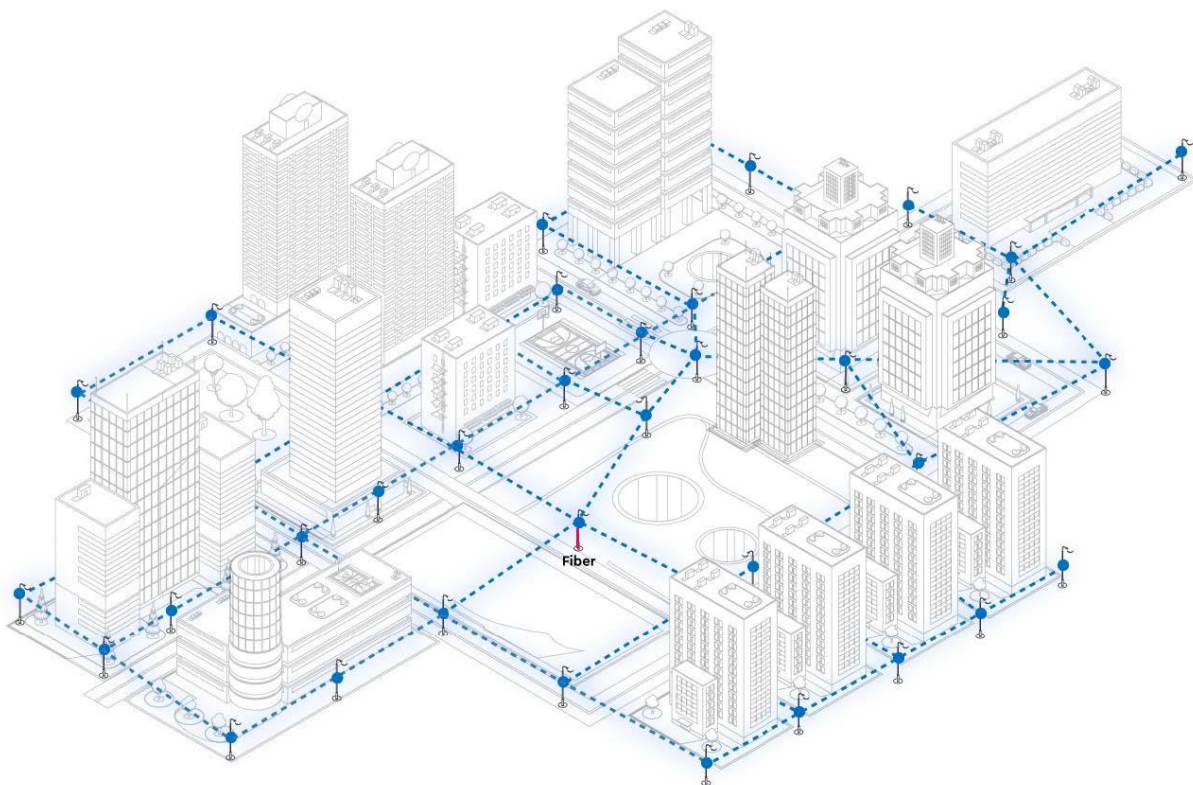
## TERRAGRAPH DISTRIBUTION NODE



### INTRODUCTION

MLTG-360 is a Terragraph™ certified distribution node (DN). MLTG-360 has 4 radios, supporting 360° coverage. Each radio of MLTG-360 is equipped with a 256-element beamforming phased array antenna, supporting up to 3.8 Gbps aggregate throughput. In addition, MLTG-360 supports advanced mesh solution to establish a robust wireless network. Resilient mesh can be easily constructed between multiple MLTG-360 to construct the wireless network with high availability.

MLTG-360 provides fiber-like connectivity at a lower cost than fiber which is ideal for fixed wireless access, backhaul of Wi-Fi, or cellular networks.



● MLTG-360 Distribution Nodes

## SPECIFICATIONS

PHYSICAL	
<b>Power</b>	<ul style="list-style-type: none"> <li>Passive PoE (Injector Optional)</li> <li>42.5V~59V DC terminal block</li> </ul>
<b>Dimensions (L x W x H)</b>	<ul style="list-style-type: none"> <li>19.9 x 19.9 x 20.0 cm (7.83 x 7.83 x 7.87 in)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>3.9 kg (with mount)</li> </ul>
<b>Interface</b>	<ul style="list-style-type: none"> <li>1x Gigabit Ethernet Port (PoE IN)</li> <li>1x 10 Gigabit SFP+ port</li> <li>4x Gigabit Ethernet Port (PoE OUT)*1</li> <li>4x 60GHz Radio</li> </ul>
<b>Environmental Conditions</b>	<ul style="list-style-type: none"> <li>IP66 Rating</li> <li>Operating Temperature: -40°C (-40°F) to 55°C (131°F)</li> <li>Storage Temperature: -40°C (-40°F) to 85°C (185°F)</li> <li>Operating Humidity: 5% to 95% non-condensing</li> </ul>
<b>Antenna</b>	<ul style="list-style-type: none"> <li>Type: Built-in phased array antenna</li> <li>Gain: 28 dBi°</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>FCC/CE</li> </ul>
RADIO	
<b>Standards</b>	<ul style="list-style-type: none"> <li>802.11ay</li> </ul>
<b>60GHz Radio</b>	<ul style="list-style-type: none"> <li>4 x antenna tiles per radio</li> <li>64 antenna elements for each antenna tile</li> <li>90 degrees azimuth scan range: -45° to 45°</li> <li>50 degrees elevation scan range: -25° to 25°</li> </ul>
<b>RF Output Power*2</b>	<ul style="list-style-type: none"> <li>Up to 43 dBm*3</li> </ul>
<b>Frequency Band</b>	<ul style="list-style-type: none"> <li>57-66GHz</li> </ul>
<b>Modulation</b>	<ul style="list-style-type: none"> <li>BPSK, QPSK, 16QAM</li> </ul>
PERFORMANCE	
<b>Range</b>	<ul style="list-style-type: none"> <li>Up to 300m for MCS9</li> <li>Up to 200m for MCS12</li> </ul>
<b>RF Performance (RX)</b>	<ul style="list-style-type: none"> <li>-66 dBm @ MCS9</li> <li>-61 dBm @ MCS12</li> </ul>
<b>Throughput</b>	<ul style="list-style-type: none"> <li>14 Gbps aggregated</li> </ul>

\*1: Only DC-in power supply can enable PoE out function

\*2: RF output power here stands for EIRP with antenna gain

\*3: Maximum power is limited by local regulatory requirements

**KEY FEATURES****Support channel 1 to channel 4 (57-66GHz)****Up to 3.8Gbps bi-directional aggregate throughput for each radio****Beamforming technology with phased array antenna for easy alignment****Support TDMA-MAC for dynamic bandwidth allocation****Support Over-the-Air (OTA) Security with AES128 encryption****Mesh network with IPv6 routing****Support QoS with 4 service classes****Self-recovery & optimization****IPv6 tunneling****Support Layer 2 Forwarding**

- Support VLAN transparent transmission
- Support management VLAN

**ORDERING INFORMATION**

PART NUMBER	DESCRIPTION	Power Consumption
<b>MLTG-360</b>	<ul style="list-style-type: none"> <li>• Terragraph DN with 4 radios, 360° coverage</li> </ul>	<ul style="list-style-type: none"> <li>• 75W max.</li> </ul>
<b>MLTG-360-3</b>	<ul style="list-style-type: none"> <li>• Terragraph DN with 3 radios, 270° coverage</li> </ul>	<ul style="list-style-type: none"> <li>• 60W max.</li> </ul>
<b>MLTG-360-2P</b>	<ul style="list-style-type: none"> <li>• Terragraph DN with 2 radios (in parallel), 180° coverage</li> </ul>	<ul style="list-style-type: none"> <li>• 45W max.</li> </ul>
<b>MLTG-360-2R</b>	<ul style="list-style-type: none"> <li>• Terragraph DN with 2 radios (at right angle), 180° coverage</li> </ul>	<ul style="list-style-type: none"> <li>• 45W max.</li> </ul>
<b>MLTG-360-1</b>	<ul style="list-style-type: none"> <li>• Terragraph DN with 1 radios, 90° coverage</li> </ul>	<ul style="list-style-type: none"> <li>• 30W max.</li> </ul>

**ACCESSORIES**

PART NUMBER	DESCRIPTION
<b>J-Bracket</b>	<ul style="list-style-type: none"> <li>• MLTG-360 Bracket, Pole mount</li> </ul>
<b>PoE Injector</b>	<ul style="list-style-type: none"> <li>• 90W PoE Injector*</li> <li>• 60W PoE Injector</li> </ul>