LiDAR Sensor Options

- Quanergy M8 (Plus)
- Velodyne Puck (VLP-16)
- Velodyne HDL-32E
- Quanergy M8 (Ultra)
- Velodyne Ultra Puck (32C)
- Teledyne Optech CL-360
**Quanergy M8 (Plus)**

**Tactical-Range LiDAR Unit**
- Maximum range: Up to 150 m (nadir)
- Range accuracy: ± 3 cm
- Scan rate: 5-20 Hz
- Returns: 3
- Weight: 900g
- Wavelength: 905 nm

**Notes:**
- M8 comes in three variations – Core, Plus and Ultra
- Core has a maximum range of < 100 m
- Plus has a maximum range of < 150 m
- Ultra has a maximum range of < 200 m
- 420,000 points/second (per return)

**Quanergy M8 (Ultra)**

**Mid-Range LiDAR Unit**
- Maximum range: Up to 200 m (nadir)
- Range accuracy: ± 3 cm
- Scan rate: 5-20 Hz
- Returns: 3
- Weight: 900 g
- Wavelength: 905 nm

**Notes:**
- M8 comes in three variations – Core, Plus and Ultra
- Core has a maximum range of < 100 m
- Plus has a maximum range of < 150 m
- Ultra has a maximum range of < 200 m
- 420,000 points/second (per return)

**Velodyne Puck (VLP-16)**

**Tactical-Range LiDAR Unit**
- Effective range: < 75 m
- Range accuracy: ± 3 cm
- Scan rate: 5-20 Hz
- Returns: 2
- Weight: 830 g
- Wavelength: 903 nm

**Notes:**
- Most cost-effective LiDAR sensor for most applications
- Variations include ‘Lite’ and ‘Hi-Res’
- VLP-16 Lite weighs 240 g less (590 g)
- VLP-16 Hi-Res has narrower vertical FOV and thus improved vertical resolution

**Velodyne Ultra Puck (32C)**

**Mid-Range LiDAR Unit**
- Effective range: < 150 m
- Range accuracy: ± 3 cm
- Scan rate: 5-20 Hz
- Returns: 2
- Weight: 925 g
- Wavelength: 903 nm

**Notes:**
- Channels: 32 beams
- 600,000 points/second (per return)
- Horizontal FOV / Resolution: 360° / 0.1-0.4°
- Vertical FOV / Resolution: 40° / 0.1-0.4°

**Velodyne HDL-32E**

**Tactical-Range LiDAR Unit**
- Effective range: < 75 m
- Range accuracy: ± 2 cm
- Scan rate: 5-20 Hz
- Returns: 2
- Weight: 1,000 g
- Wavelength: 903 nm

**Notes:**
- Highest grade LiDAR unit for tactical-range projects
- 700,000 points/second (per return)

**Teledyne Optech CL-360**

**Long-Range LiDAR Unit**
- Maximum range: 775 m (nadir)
- Range accuracy: ± 1 cm
- Scan rate: 50-250 Hz
- Returns: Up to 4
- Weight: 3,500 g
- Wavelength: 1,550 nm

**Notes:**
- Highest grade UAV LiDAR unit available
- Horizontal FOV / Resolution: 360° / 12µrad
- Dimensions: 310(L)×160(W)×116(H) mm