

Meshlium Xtreme

Datasheet



Specifications:



| | | |
|--|--|--------------|
| Processor | 500MHz (x86) | |
| RAM memory | 256MB (DDR) | |
| Disk memory | 8GB / 16GB / 32GB * | |
| Power | 5W (18V) | |
| Power Source | POE (Power Over Ethernet) | |
| Normal Current Consumption | 270mA | |
| High Current Consumption | 450mA | |
| Max Supply Current | 1'5A | |
| Enclosure | Material | Aluminium |
| | Dimensions | 210x175x50mm |
| | Weight | 1,2Kg |
| | External protection | IP65 |
| Temperature Range | -20°C / 50°C | |
| Response Time to ethernet ping | 60s | |
| Time to have all the services running | 90s | |
| Types of power supply ** for POE | AC-220V | |
| | Battery – solar panel (DC-12V) | |
| | Car lighter (DC-12V) | |
| System | Linux, Debian. OLSR Mesh communication protocol. Madwifi Drivers. | |
| Management software | Meshlium Manager System (open source) | |
| Security | Authentication WEP, WPA-PSK, HTTPS and SSH access. | |

(*) Depends on the options chosen

(**) Only with the accessories supplied by Libelium

Wifi AP - 2.4GHz Radio:



| WIFI RADIO | |
|------------|----------------------------------|
| Chipset | Atheros AR5213A - IEEE 802.11b/g |
| Tx-Power | 100mW - 20 dBm |
| Distance | 500m* |

(*) Depending on antenna and line of sight

| ANTENNA | |
|------------|-----------------|
| Type | Omnidirectional |
| Gain | 5dBi |
| Dimensions | 224 x 22 mm |

Wifi Mesh Dual Band 2.4 GHz / 5GHz Radio:



| WIFI RADIO | |
|------------|------------------------------------|
| Chipset | Atheros AR5213A - IEEE 802.11a/b/g |
| Tx-Power | 20dB - 802.11b/g / 18dB - 802.11a |
| Distance | 2-50km* |

(*) Depending on antenna and line of sight

| ANTENNA | |
|------------|-----------------------------|
| Type | Omnidirectional |
| Gain | 5dBi - 2.4GHz / 8dBi - 5GHz |
| Dimensions | 224 x 22 mm |

Zigbee Radio:



| | |
|-----------------------|-----------------------|
| Model | XBee - PRO - 802.15.4 |
| Frequency | 2.4GHz |
| Tx-Power | 100mW |
| Rx Sensitivity | -100dBm |
| Antenna | 5dBi Dipole |
| Distance | 7km* |

| | |
|-----------------------|---------------------|
| Model | XBee - PRO - ZigBee |
| Frequency | 2,4GHz |
| Tx-Power | 50mW |
| Rx Sensitivity | -102dBm |
| Antenna | 5dBi Dipole |
| Distance | 7km* |

| | |
|-----------------------|------------------|
| Model | XBee - PRO - 868 |
| Frequency | 868MHz |
| Tx-Power | 315mW |
| Rx Sensitivity | -112dBm |
| Antenna | 5dBi Dipole |
| Distance | 12km* |

| | |
|-----------------------|------------------|
| Model | XBee - PRO - 900 |
| Frequency | 900MHz |
| Tx-Power | 50mW |
| Rx Sensitivity | -100dBm |
| Antenna | 5dBi Dipole |
| Distance | 10km* |

| | |
|-----------------------|------------------|
| Model | XBee - PRO - XSC |
| Frequency | 900MHz |
| Tx-Power | 100mW |
| Rx Sensitivity | -106dBm |
| Antenna | 5dBi Dipole |
| Distance | 12km* |

(*) Depending on antenna and line of sight

Bluetooth Radio:



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|--------------------------|---------------------------------------|
| Model | BT100 - Bluetooth 1.1 - IEEE 802.15.1 |
| Tx-Power | 17dBm |
| Transmission Rate | 721Kbps |
| Antenna | 5dBi Dipole |
| Distance | 200m* |

(*) Depending on antenna and line of sight

GSM/GPRS Module:



| | |
|--------------------|--|
| Model | Hilo |
| Quad Band | 850MHz/900MHz/1800MHz/1900MHz |
| Tx-Power | 2W(Class 4) 850MHz/900MHz, 1W(Class 1) 1800MHz/1900MHz |
| Sensitivity | -106dBm |
| Rx Rate | 85.6Kbps |
| Tx Rate | 42.8Kbps |
| Antenna | 3dBi |

GPS Module:



| | |
|-----------------------------|--|
| Model | A1084 - Vincotech |
| Output | NMEA |
| Tracking Sensibility | -159dBm |
| Hot start | < 1s |
| Warm start | < 32s |
| Cold start | < 35s |
| Antenna | 26dBi (+/-4.5dBi) - 3m cable. Magnetic surface |

Certifications:

- CE (Europe)
- FCC (USA)

