

# Maven digital DAS EMEA-APAC

## Stratus quad/pentaband high power

Datasheet version 2.3

**Outstanding  
Performance**

**End to end  
Digital platform**

**Always  
Future-proof**

**Overall  
Cost efficiency**

**More  
Sustainable**

Maven Wireless offers new solutions for wireless coverage in all parts of the world. Our products are end to end digital and future-proof, comes with the best performance and cost efficiency you can find. We also have high marks on sustainability and a burning passion for making our customers and end-users life safer, better and easier by securing 100% wireless coverage.

**Stratus remote unit  
Orion head end unit**



## Orion specification



### General

|                       |   |
|-----------------------|---|
| Mains power           | 85 – 264 VAC, redundant, Hot swappable<br>-72 – -36 VDC, redundant, Hot swappable   |
| Power consumption     | 100 W fully loaded*   |
| Management            | Ethernet 10/100/1000<br>micro USB<br>Standard USB accessory connector<br>4 external alarm inputs & 1 external alarm output optional<br>Optional built in 4G modem |
| Operating temperature | +5 to +45 °C  |
| RF input              | Up to 8 hot swappable band modules  |
| System Gain           | 15 to 45dB in 0.1dB steps   |
| Gain Flatness         | 1 dB pp   |

### Digital Interface

|                    |  |
|--------------------|--|
| CPRI ports         | 4 x QSFP+ connectors with option for SFP+ adapter  |
| Spectrum bandwidth | Up to 1200 MHz RF spectrum per QSFP+ connector, either as a single WDM link or four 300MHz links |
| Single mode fibre  | 1310 nm band, up to 40 km distance   |
| Multi mode fibre   | 850 nm band, up to 300 m distance  |

### RF Module

|                |   |
|----------------|---|
| Connections    | 4 RF interfaces, each with a duplex and simplex QMA connection. |
| RF input range | 0 to +30 dBm composite per RF module                            |
| Frequencies    |   |

| Uplink          | Downlink              |
|-----------------|-----------------------|
| 703 – 748 MHz   | 758 – 803 MHz         |
| 824 – 844 MHz   | 869 – 889 MHz         |
| 832 – 862 MHz   | 791 – 821 MHz         |
| 880 – 915 MHz   | 925 - 960 MHz         |
| 1710 – 1785 MHz | 1805 – 1880 MHz       |
| 1920 – 1980 MHz | 2110 – 2170 MHz       |
| 2500 – 2570 MHz | 2620 – 2690           |
|                 | 2300 – 2400 MHz (TDD) |
|                 | 2500 – 2700 MHz (TDD) |
|                 | 3400 – 3800 MHz (TDD) |

### Mechanical

|                                   |  |
|-----------------------------------|--|
| Dimensions (height, width, depth) | 130 x 436 x 309 mm in standard 19" rack format |
| Weight                            | < 8 kg   |

\*Thermal dissipation

## Stratus specification



### General

|                       |   |
|-----------------------|---|
| Mains power           | 85 – 264 VAC, -72 – -36 VDC optional                                |
| Power consumption     | 400 W fully loaded**  |
| Management            | Ethernet 10/100/1000 , micro USB, Standard USB accessory connector  |
| Operating temperature | -25 to +55 °C †   |
| Ingress protection    | IP66  |
| Antenna port          | 4.3-10 or 7/16 optional, 1 combined antenna port as standard, max 4 |
| Digital Interface     | 3 x QSFP+ and 4 x SFP+  |
| Number of bands       | up to 5 bands in one enclosure                                      |

### RF parameters

|                     |   |
|---------------------|---|
| Output power        | +43 dBm per band @ 8 dB Peak-to-average ratio |
| Noise figure        | < 3 dB at max gain                            |
| Return loss         | > 14 dB                                       |
| System impedance    | 50 Ω  |
| Maximum input power | +17 dBm, non destructive *                    |

| Band     | Uplink      | Downlink    | Operation bandwidth | Composite output power | Technologies                                |
|----------|-------------|-------------|---------------------|------------------------|---|
| 700      | 703 – 748   | 758 – 803   | 45 MHz              | + 43 dBm               | LTE, 5G NR<br>CELL/GSM(**),<br>WCDMA, LTE   |
| 850      | 824 - 844   | 869 – 889   | 20 MHz              | + 43 dBm               |   |
| 800      | 832 – 862   | 791 – 821   | 30 MHz              | + 43 dBm               | LTE, 5G NR<br>GSM(**), WCDMA,<br>LTE, 5G NR |
| 900      | 880 – 915   | 925 - 960   | 35 MHz              | + 43 dBm               |   |
| 1800     | 1710 – 1785 | 1805 – 1880 | 75 MHz              | + 43 dBm               | GSM(**), WCDMA,<br>LTE, 5G NR               |
| 2100     | 1920 – 1980 | 2110 – 2170 | 60 MHz              | + 43 dBm               |   |
| 2300 TDD | 2300 – 2400 |             | 100 MHz             | +43 dBm                | WCDMA, LTE, 5G NR<br>LTE, 5G NR             |
| 2600 TDD | 2500 – 2700 |             | 100 MHz             | +43 dBm                |   |
| 2600     | 2500 – 2570 | 2620 – 2690 | 70 MHz              | + 43 dBm               | LTE, 5G NR<br>LTE, 5G NR                    |
| C-Band   | 3400-3800   |             | 100 MHz             | +43 dBm                |   |

### Mechanical

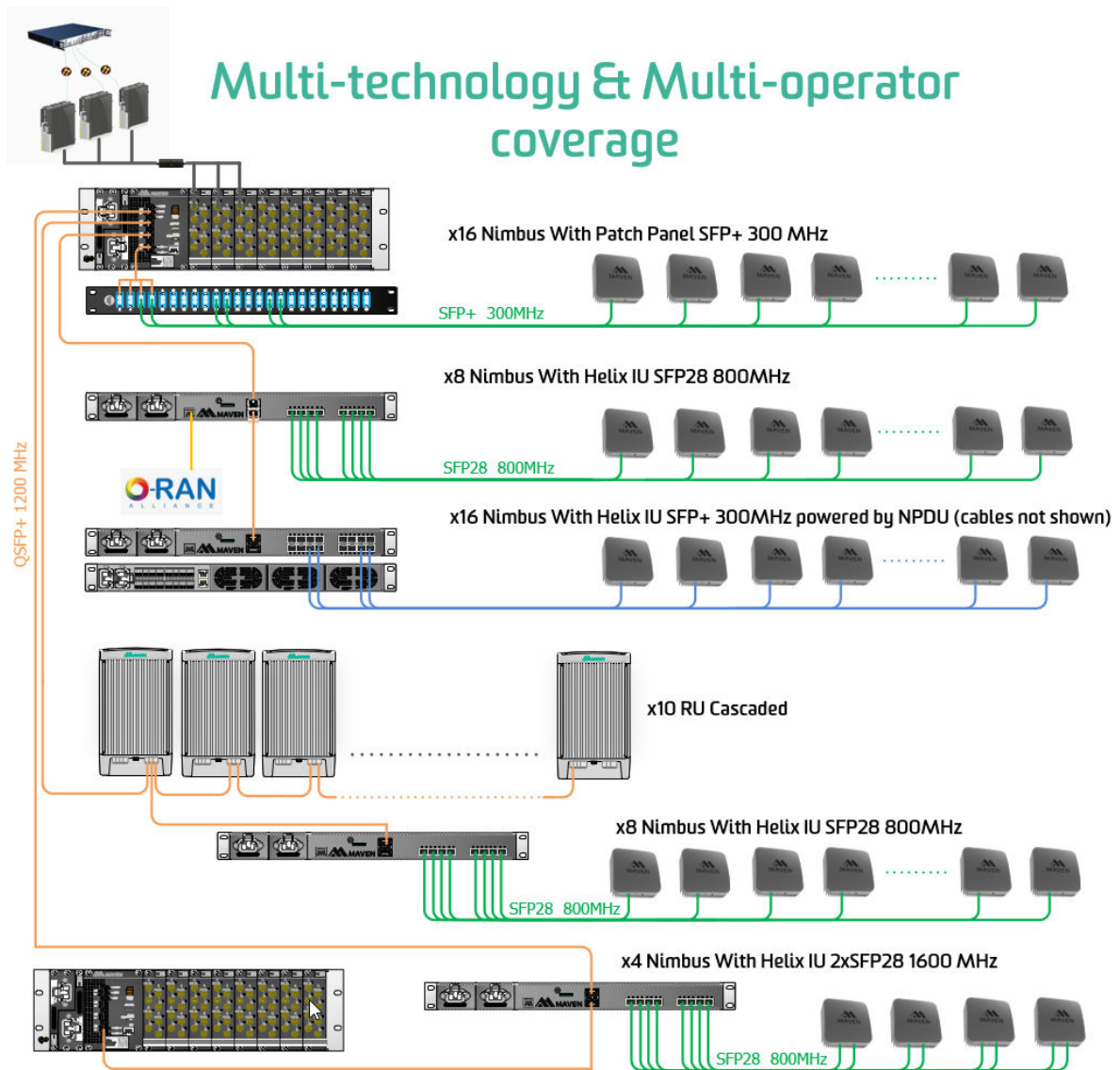
|                                   |                             |
|-----------------------------------|-----------------------------|
| Dimensions (height, width, depth) | Typical: 670 x 383 x 270 mm |
| Weight                            | Max 25 kg                   |

### Standards & approvals

|                           |                                 |
|---------------------------|---------------------------------|
| EMC & safety              | Low voltage directive 73/23/EEC |
| EMC directive 2004/108/EC | RED directive 2014/53/EU        |

\*\*Thermal dissipation

# Multi-technology & Multi-operator coverage



- †) max 50 °C for quad band with full power in all bands
- \*) noise figure increases slowly and gradually after -37 dBm
- \*\*\*) maximum +37 dBm for GSM

Various frequency combinations in the same enclosure are available. Contact Maven Wireless for more information. All parameters are subject to change.