

# Maven digital DAS PS EMEA-APAC

## Stratus high power for Critical Comms

Datasheet version 2.8

**Outstanding  
Performance**

**End to end  
Digital platform**

**Always  
Future-proof**

**Overall  
Cost efficiency**

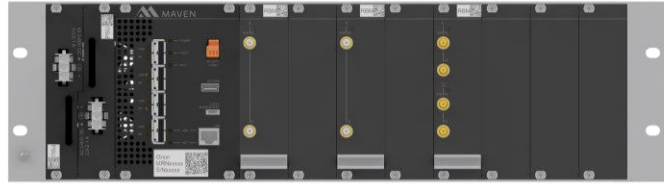
**More  
Sustainable**

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 -72 – -36 VDC, redundant, Hot swappable
Power consumption	100 W fully loaded*
Management	Ethernet 10/100/1000 micro USB Standard USB accessory connector 4 external alarm inputs & 1 external alarm output optional Optional built in 4G modem
Operating temperature	+5 to +45 °C
RF input	Up to 6 hot swappable band modules 2 PS 400 MHz modules and 4 cellular bands 1 duplex/simplex input per radio board for UHF/VHF Option of 2 or 4 inputs per radio board for 800 MHz / GSM-R
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	1 or 2 RF interfaces, each with a duplex and simplex QMA connection.
RF input range	0 to +30 dBm composite per RF module

Frequencies	Uplink (MHz)	Downlink (MHz)
	-	87.5-108.0
	138 – 174	138 – 174
	-	174-240
	380 – 385	390 – 395
	380 – 470	380 – 470
	Band 28	Band 28
	806 – 824	851 – 869

### Mechanical

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

\*Thermal dissipation +- 15 %

## Stratus Specifications



### General

Mains power	85 – 264 VAC, -72 – -36 VDC optional
Power consumption	150 W (single band), 225 W (dual band)**
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
Digital Interface	3 x QSFP+ and 4 x SFP+
Number of bands	up to 4 bands in one enclosure

### RF parameters

Output power	Varies, depending on band, see table below
Noise figure	4.5 dB typical at 380 MHz up to 5.5 at 450 MHz
Return loss	> 14 dB
System impedance	50 Ω
Maximum input power	+17 dBm, non destructive

Band	Uplink (MHz)	Downlink (MHz)	Operation bandwidth	Composite output power	Technologies
FM	87.5 - 108		20.5 MHz	+ 28 dBm	FM
VHF	138 – 174		36 MHz	+ 33 dBm	VHF
DAB	174-240		66 MHz	+ 30 dBm	DAB/DAB+
400	380-470	380-470	5 MHz	+ 40 dBm	TETRA TMO
400	Other frequencies available on request		5/6,5 MHz ***	+ 40 dBm	TETRA TMO
448	442.5	448.5	3 MHz	+ 37 dBm	FM
700	Band 28	Band 28	45 MHz	+ 43 dBm	PS-LTE
800	TBD	TBD	TBD	+ 43 dBm	PS-LTE
800	806 – 824	851 – 869	18 MHz ****	+ 43 dBm	TETRA TMO

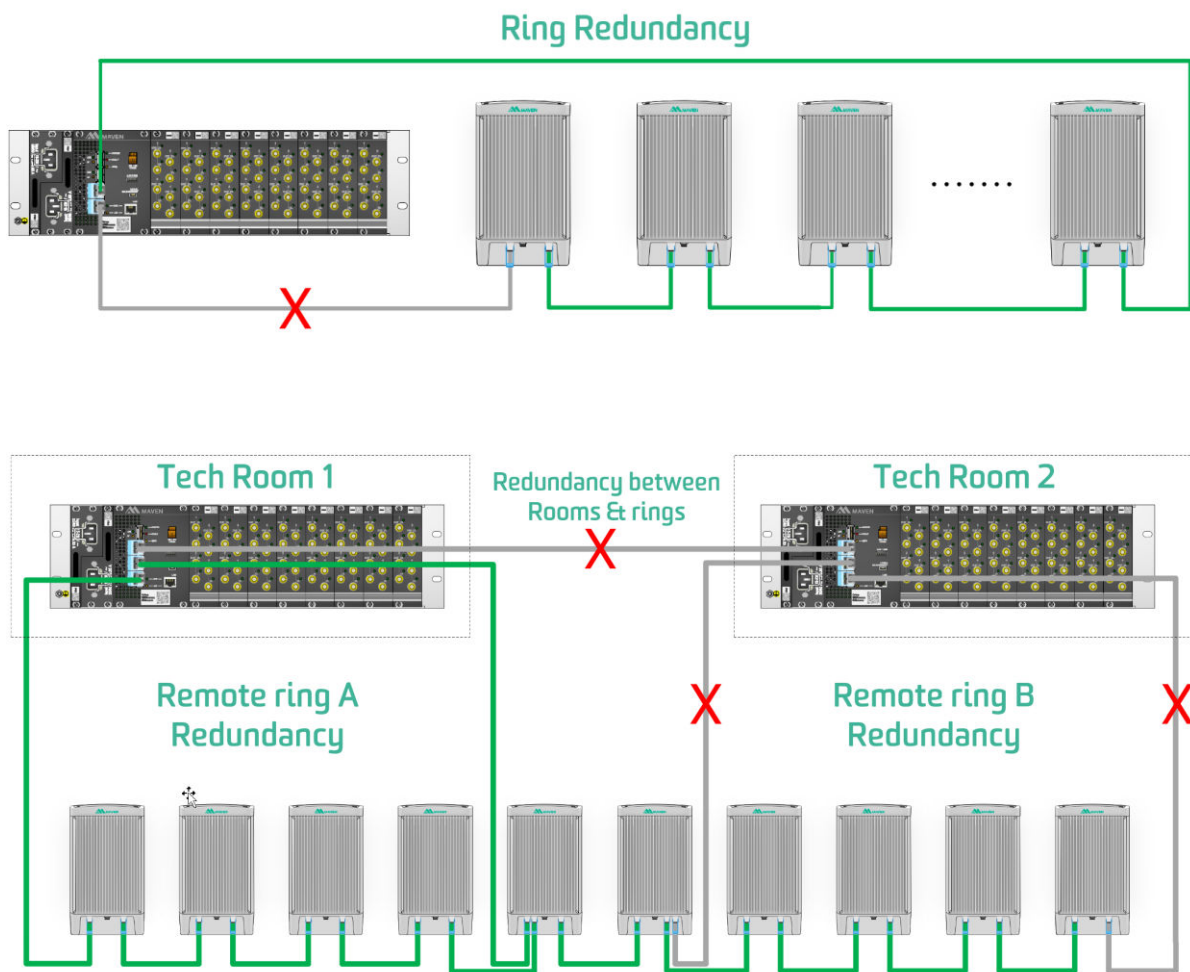
### Mechanical

Dimensions (height, width, depth)	Typical: 670 x 383 x 270 mm UHF/VHF: 710 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

## Redundancy Examples



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