

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

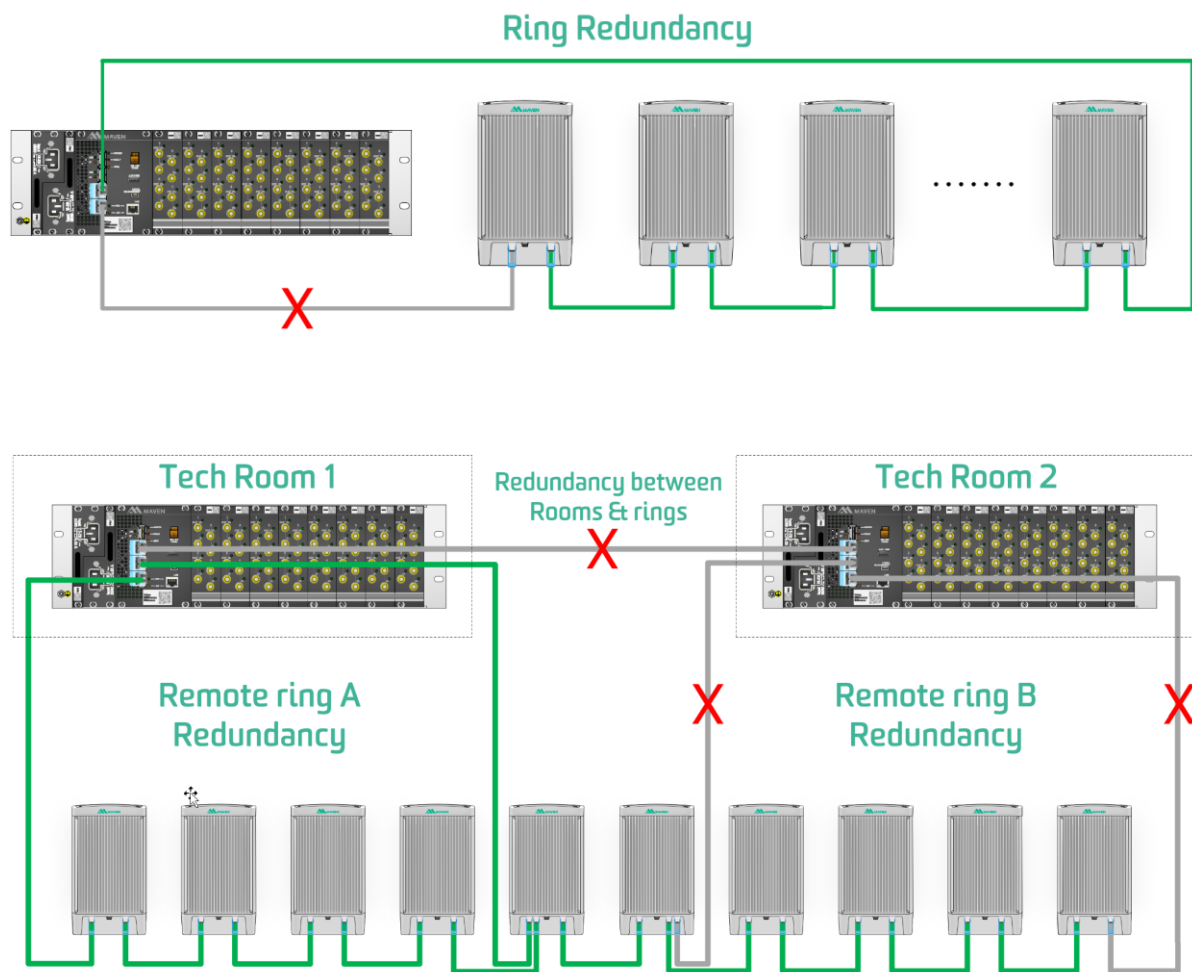
Mechanical

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.