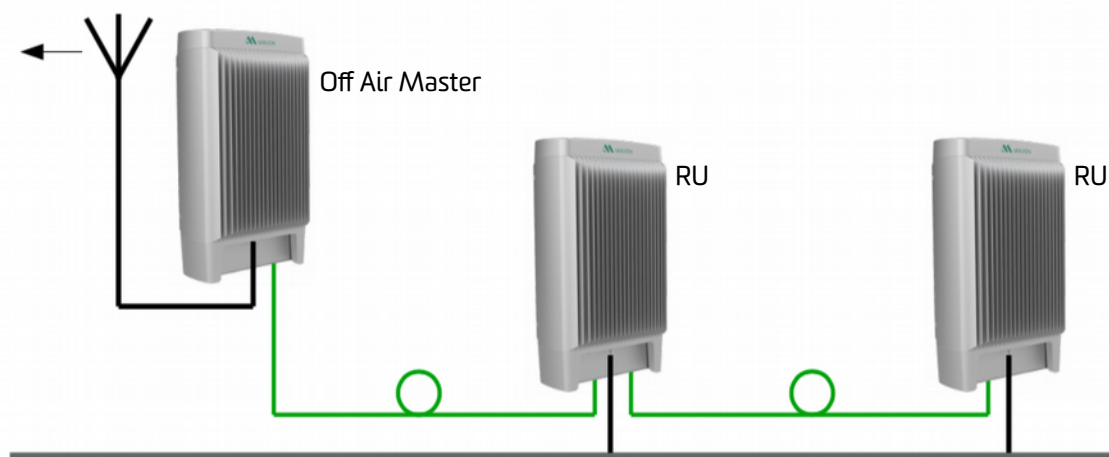


Datasheet version 1.4

System Features

- Fully digital end-to-end DAS system
- Fanless IP65 rated master & remote units
- Highly efficient, reducing cost and emissions
- Up to 6 bands in each off air master unit
- 5G-ready system
- Cascadable units
- Excellent PIM and noise performance
- System auto-commissioning
- Redundant system with automatic fail over



Maven DAS is a highly capable all-digital cellular DAS platform supporting multi-operator, multi-band installations for all EMEA bands. The system consists of Stratus high-power or Cumulus medium power remotes, connected to the Off Air Master unit which picks up signals from the macro network which are fed into digital CPRI feeding the remotes. The off air master is also fanless and implements up to 6 RF bands in one enclosure.

The digital fibre interface connects with QSFP+ modules which each can carry up to 1200 MHz of RF spectrum, enabling spare bandwidth for future spectrum allocations such as 5G. The system supports various topologies for flexibility and redundancy such as star and ring

topologies. The units can be cascaded flexibly. Both single mode and multi mode fibre can be used. Units can also be connected using SFP+ connections, for example to give local connections for MIMO support.

Installation of the Maven DAS is quick thanks to few components, and also since the units are a one man lift. The system has auto-commissioning functionality which brings the system up and running quickly.

The secure web interface is intuitive and easy to use, making it useful for any level of technician. The equipment can be accessed from a laptop or a tablet. The standardised supervision interface can be connected to any standard NMS using SNMP v2c or v3. The units provide a dry-contact relay output for alarm status.

Ordering Information

Item	Description	Part Number
Cirrus HB 7/8/9/18/21/26 AC	Off air master 7/8/9/18/21/26 AC	MAN00001
Cirrus TB 18/21/26 AC	Off air master 18/21/26 AC	MAN00002
Cirrus TB 7/8/9 AC	Off air master 7/8/9 AC	MAN00003
Cirrus DB 8/9 AC	Off air master 8/9 AC	MAN00005
Cirrus QB 8/9/18/21	Off air master 8/9/18/21 AC	MAN00006
Cirrus TB 8/9/18	Off air master 8/9/18 AC	MAN00009

Cirrus Off Air Master Specification



General

Mains power	85 – 264 VAC, -48 VDC optional
Power consumption	200 W max fully loaded
Management	Ethernet 10/100/1000, micro USB, Standard USB accessory connector
Remote Access	Optional cellular modem
Operating temperature	-25 to +55 °C
Ingress protection	IP65
RF interface	Up to 6 bands in one enclosure
Antenna port	4.3-10 or 7/16 optional
System Gain	60 to 90 dB in 0.1 dB steps
Gain flatness	1 dB pp

Digital Interface

CPRI ports	3 x QSFP+ and 4 x SFP+
Spectrum bandwidth	Up to 1200 MHz RF spectrum per QSFP+ or 300MHz per SFP+ link
Single mode fibre	Up to 40 km distance
Multi mode fibre	Up to 300 m distance

RF Parameters

Output power	+17 dBm, non destructive		
RF input range	<u>Uplink (UL)</u>	<u>Downlink (DL)</u>	<u>Technologies</u>
Frequencies	703 – 733 MHz	758 – 788 MHz	LTE
	824 – 849 MHz	869 – 894 MHz	All
	832 – 862 MHz	791 – 821 MHz	LTE
	880 – 915 MHz	925 - 960 MHz	GSM, WCDMA, LTE
	1710 – 1785 MHz	1805 – 1880 MHz	GSM, WCDMA, LTE
	1920 – 1980 MHz	2110 – 2170 MHz	WCDMA, LTE
	2500 – 2570 MHz	2620 – 2690 MHz	LTE

+30 dBm per band

Mechanical

Dimensions (height, width, depth)	670 x 383 x 270 mm
Weight	max 25 kg

Standard & Approvals

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

Note: All parameters are subject to change