

RFEYE STORMCASE 100-8

MAN-PORTABLE SPECTRUM MONITORING SYSTEM

Mission-ready integrated solution for standalone spectrum surveillance and mobile monitoring operations.

The RFeye Stormcase 100-8 is a man-portable integrated system designed for easy mobile spectrum monitoring from a fully autonomous and ruggedized standalone unit. Built into a tough storm case with thermostatically-controlled fans, the system includes a Node 100-8, internal and external antenna ports, high-performance rechargeable battery and integrated SSD memory for high-volume data collection during mobile field operations.

Embedded data logging software applications are typically pre-programmed with the required measurement profile prior to deployment, allowing autonomous spectrum surveillance and surveying operations to be performed by non-technical personnel where necessary. Data is visualized and analyzed post-survey using RFeye application software.



STORMCASE 100-8 SPECIFICATIONS



Receiver

Integrated receiver 1 x Node 100-8

Frequency

Range 9 kHz to 8 GHz

Noise figures at maximum sensitivity

9 kHz to 0.1 GHz 10 dB typical

0.1 GHz to 2.4 GHz 6 dB typical

2.4 GHz to 6 GHz 7 dB typical

6 GHz to 8 GHz 8 dB typical

Phase noise

Receiver input at ≤ 1 GHz ≤ -130 dBc/Hz at 20 kHz offset, typ.

Receiver input at > 8 GHz ≤ -121 dBc/Hz at 20 kHz offset, typ.

Signal analysis

Instantaneous bandwidth 100 MHz

Tuning resolution 1 Hz

Internal frequency reference

Initial accuracy @ 25°C ± 0.1 ppm typical

Stability over temperature ± 0.3 ppm typical

Ageing ± 0.04 ppm per day

Programmable sweep modes

Sweep speed at 2 MHz RBW 280 GHz/s typical

Sweep speed at 61 kHz RBW 245 GHz/s typical

User programmable modes Continuous, single timed, user trigger and adaptive

Trigger-on-event modes User defined masks, actions and alarms

Sampling

Resolution 16 bits per channel (I&Q)

Rate 125 MS/s I&Q

Third order intercept points with AGC

≤ 1 GHz + 20 dBm typical

> 1 GHz to ≤ 6 GHz + 15 dBm typical

Local oscillator

Re-radiation ≤ -90 dBm typical

Frequency references

Selectable GPS Internal or external

Optional: GPS Holdover Reference

Internal input 10 MHz ± 10 ppm

Processor sub-system

CPU Intel E3845 quad core

System software

Boot firmware BIOS

Operating system Linux, kernel v2.6

Data storage

Removable SSD 512 GB (1 TB option)

I/O Ports

RF input (External) 3 x N-type, 9 kHz - 8 GHz

GPS (External) N-type (by-passable with internal antenna via Int/Ext patch)

DC Power (External Input) 1 x 4-pin Amphenol MS 3102 series

Network (External) 1 x 1 GIGe

Universal Serial Bus (Internal) 1 x USB 2.0

Data Logger Internal control switch and status LEDs

Power

Power Adapter 65W (External) 90-264VAC input, 24VDC 2.7 A output

Battery Charger (External) Universal, 100-240VAC

Battery (Internal) 9.9 Ah Lithium-ion, rechargeable 5 hrs. nominal operation.

Optional: High Capacity Battery Pack > 10 hrs. operation with ext Hot-swappable batteries

Power consumption

Nominal @ 20°C 50 W

Maximum 65 W

Environmental

Operating temperature -30 to +50°C (-22 to 122°F)

Storage temperature -40 to +71°C (-40 to 160°F)

Ingress protection IP55 minimum

Mechanical

Dimensions 490 x 390 x 230 mm (19.3 x 15.4 x 9.1 inches)

Weight (case only - no battery) 14 kg (31 lbs)

Weight (single 9.9 Ah battery) 1.5 kg (3.3 lbs)



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