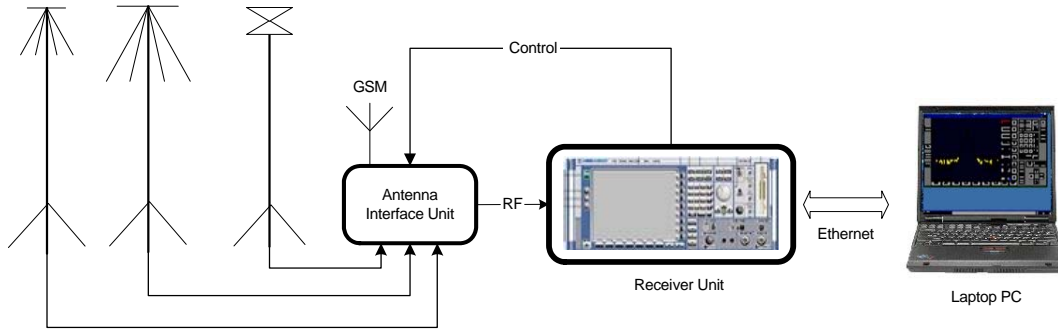


**Hardware Architecture**

The lightweight and portable AIMS system is designed to minimise operating costs. A number of systems can be serviced by a single operator, allowing statistics to be collected autonomously at multiple sites over many days.

The system comprises three main hardware components: the Receiver Unit, the Antenna Interface Unit and the Antenna Fit. User control is via a standard laptop PC.



**Receiver Unit**

Comprising a wide-band receiver, thermal management and lightweight protection, this unit performs the RF acquisition, data digitisation and processing. The processed data from many days monitoring is stored for retrieval on completion of the test. The unit is designed for outdoor use.



**Antenna Interface Unit**



This unit accepts inputs from up to three antennas and, under command from the receiver unit, switches the appropriate antenna into circuit. It also embodies a noise source for auto-calibration; a low-noise amplifier; and a GSM modem, which provides automatic SMS status updates. The unit is designed for outdoor use and is rated to IP55.

FLY014/1

MASS is an independent UK Systems House with a strong Defence & Aerospace market focus, offering specialist skills in:

- **Electronic Warfare**
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## Antenna Fit

The broadband antenna fit provides broadband omni-directional coverage between 100MHz and 10.5GHz using just three antennas:



100MHz-600MHz



600MHz-3GHz



3GHz-10.5GHz

## Specifications

AIMS System Specifications	
Number of inputs	3
Frequency range	Up to 10.6 GHz (Extendable)
Noise figure	2.3 dB min 4.4 dB rms across frequency range
Measurement bandwidth	20 kHz to 50 MHz
Input impedance	50 ohms
Maximum input power	+10 dBm
Signal level resolution	0.1 dB
Capture modes	Channel, Sweep, Scan
Measurement modes	Total Power, I+N, MMN, Noise Source
Output statistics	Total Power, Fa, I+N, Mw, Sw, RTFU
Output document format	Microsoft Word 2002 or later
Quality standard	ISO 9001
Receiver Unit Specifications	
Operating System	Windows XP
Power Supply	240VAC 1.3A
Power Consumption	150 VA typ.
Dimensions	244 x 504 x 569 mm
Weight	26 kg
Antenna Interface Unit Specifications	
Protection Class	IP55
Power Supply	240VAC 1.0A
Power Consumption	60 VA typ.
Dimensions	330 x 230 x 110 mm
Weight	7.5 kg

MASS operates a policy of continuous product improvement and therefore reserves the right to change any of the above specifications.

