

Signal Conditioning Modules

Metamag's products assure access to the electromagnetic spectrum in highly congested RF environments, specifically for SIGINT, EW, Radar, and Communication systems. Our product portfolio builds upon novel RF analog signal processing effects that are realized at the component and sub-system level, enabled by Metamag's Auto-tune Filter® (AtF®) technology.

Metamag's Signal Conditioning Modules (SCMs) leverage Auto-tune Filters® to provide adaptive, dynamic wideband signal conditioning. SCMs are offered in generic IEEE frequency banded options and can also be tailored for specific applications and environments.

Signal Conditioning Modules can increase receiver dynamic range, protect downstream RF components from high power interference, and improve a system's jammer to signal ratio all while preserving and ensuring reception of signals of interest.



Figure 1: Rendering of Signal Conditioning Module

Capabilities and Options

- DC – 18 GHz
- Passive and/or Active
- Multiple Bands of Operation
- Digital Switching Capability
- Power Handling: 10W CW & 1kW Pulsed (1µs PW, 100 kHz PRF)

Contact Information

Email – sales@metamag.us

Phone – 781-562-0756

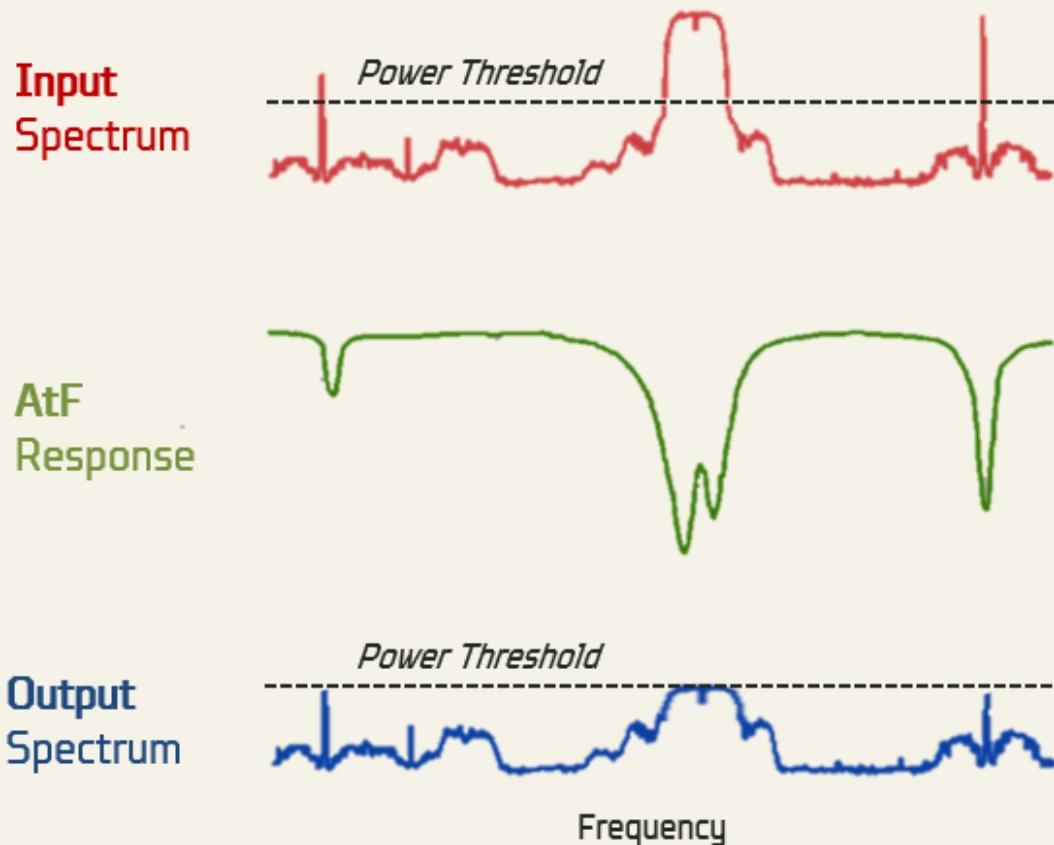


Figure 2: AtFs® automatically attenuate signals that exceed the power threshold while allowing below-threshold signals to pass with low loss.

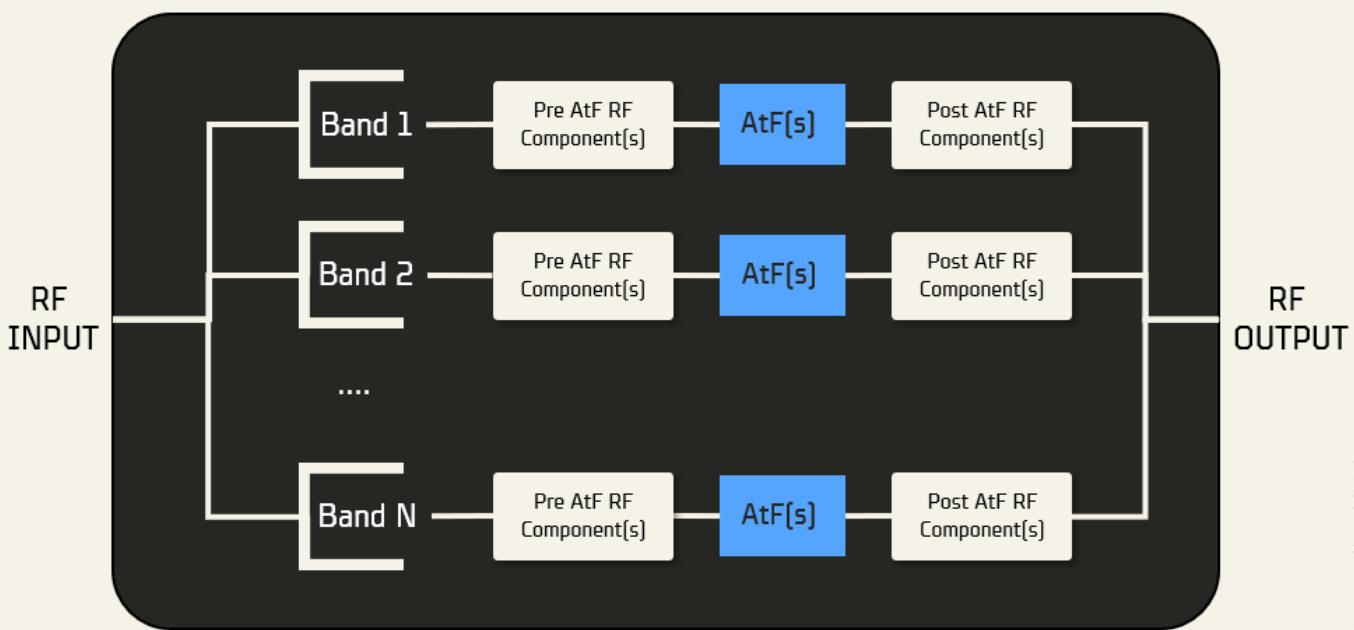


Figure 3: Functional block diagram of a signal conditioning module.

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