

Analog RF Products

The Bandit® family of analog RF products provides a series of high-performance, stand-alone RF downconverter modules. Offering a low noise figure, programmable gain and high dynamic range, they ensure that there are no gaps in the RF spectrum coverage. The Bandit series are an ideal solution for amplifying and downconverting antenna signals for communications, radar and signal intelligence systems.

• The Bandit Model 7120 is a two-channel, high-performance, stand-alone analog RF wideband downconverter. It is packaged as a small, shielded PMC/XMC module with front-panel connectors for easy integration into RF systems.

With an input frequency range from 400 to 4000 MHz and a wide IF bandwidth of up to 390 MHz, the 7120 is an ideal solution for amplifying and downconverting antenna signals. The 7120 accepts RF signals on two front-panel SSMC connectors. LNAs (Low Noise Amplifiers) are provided, along with two programmable attenuators allowing downconversion of input signals ranging from –60 dBm to –20 dBm in steps of 0.5 dB.

Output is provided as baseband I and Q signals at bandwidths up to 390 MHz. Alternatively, either I or Q output can be used at some intermediate offset frequency convenient to the application. This output is suitable for A/D conversion using Pentek high-performance signal acquisition products, such as those in the Cobalt® and Onyx® families.

This Model is available in these form factors: PMC/XMC, x8 PCIe, 3U VPX, 6U VPX, AMC, 3U CompactPCI, and 6U CompactPCI.

• The Bandit Model 8111 provides a series of high-performance, stand-alone analog RF slot downconverter modules. Packaged in a small, shielded enclosure with connectors for easy integration into RF systems, the modules offer programmable gain, high dynamic range and low noise figure.

With input options to cover specific frequency bands of the RF spectrum and an IF output optimized for A/D converters, the 8111 is an ideal solution for amplifying and downconverting antenna signals.

The 8111 accepts RF signals on a front panel SMA connector. An LNA is provided along with two programmable attenuators allowing downconversion of input signals ranging from –60 dBm to –20 dBm in steps of 0.5 dB.

Seven different input-frequency band options are offered, each tunable across a 400 MHz band, with an overlap of 100 MHz between adjacent bands. As a group, these seven options accommodate RF input signals from 800 MHz to 3 GHz.

An 80 MHz-wide IF output is provided at a 225 MHz center frequency. This output is suitable for A/D conversion using Pentek high-performance signal acquisition products, such as those in the Cobalt and Onyx families.



The Pentek ReadyFlow® Board Support Package is available for Windows and Linux operating systems. To accelerate application development, ReadyFlow is provided as a C-callable library, the complete suite of initialization, control and status functions, as well as a rich set of precompiled, ready-to-run-examples.







Model 8111 Analog RF Slot Downconverter