

Shadow EW™ 120

Complete software-defined EW radio transceiver
for dynamic platform needs in a small form factor

Building upon decades of industry-leading experience from across the electronic warfare (EW) spectrum, the Shadow EW family of products delivers large-platform capability in a compact footprint. The Shadow EW 120 series is a hybrid software-defined radio (SDR), optimized for radar EW operations while maintaining the flexibility to support signals intelligence (SIGINT) and communications intelligence (COMINT) applications through its streaming in-phase and quadrature (IQ) interface.

The system integrates a radio frequency (RF) front-end with coverage up to 6 GHz and an instantaneous pulse descriptor word (PDW) processing bandwidth to match, supported by a TDA4 processor, Kintex KU15P, and an optional Jetson Orin NX 16Gb module.

To facilitate integration, software and hardware interface control documents (ICDs) are available for Shadow EW SDRs. Industry-standard gigabit Ethernet interface protocols are used to enable easy integration into a wide range of system architectures.



Features and benefits

- 5 MHz–6.0 GHz RF coverage supports broad EW, SIGINT, and COMINT missions
- Low SWaP-C design fits small-form-factor and unmanned aerial vehicle (UAV) payload applications
- 6 GHz instantaneous bandwidth (IBW) receiver enables wide-band signal awareness
- Dual 1.5 GHz IBW transmitters allow simultaneous multi-channel operations
- External power amplifier support provides transmit configuration flexibility
- Gigabit Ethernet interface simplifies integration with standard system architectures
- Kintex KU15P and optional Jetson Orin NX deliver onboard signal-processing capability
- BIG IRON framework compatibility supports enterprise-level EW integration
- MIL-STD-810H qualification ensures reliable performance in harsh environments

Compact. Configurable. Combat-ready. Shadow EW.

Specifications

Model #	Shadow EW 120
Weight	< 7.0 lbs.
Dimensions	4.4" x 3.34" x 6.94"
Watts	< 150 watts max
Frequency coverage	5 MHz - 6 GHz
System receive IBW	6 GHz
System transmit IBW	3 GHz (2x 1.5 GHz)
RF inputs/outputs	2/2
Production start	2028

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