

# HIGH WEST

SOFTWARE DEFINED RADIO (SDR) PAYLOAD



**High West is a fully integrated SDR system designed specifically to meet the SWAP-C constraints and security requirements of tactical unmanned systems.**

High West is USSOCOM Modular Payload compliant and in a 1U form factor. It provides frequency agility and tuning range of 70 MHz to 6 GHz, instantaneous BW of 50 MHz, and a modular RF architecture that supports customization to meet platform specific requirements such as extending frequency range up to Ka-band.



*High West top front view*

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# HIGH WEST – SDR FEATURES

## USSOCOM Modular Payload compliant system for STUAS

- Fully featured Epiq Matchstiq™ Z2+ available for user applications
  - Integrates mature, proven COTS SDR capability widely used in commercial and government space
  - Epiq SDK/API enables seamless Software and Firmware development
  - Compatible with powerful, widely adopted libraries like SoapySDR, GNU Radio, and GOTS applications through Epiq SDK
  - 70 – 6000 MHz transceiver<sup>1</sup> with 1 Tx, 1 Rx channels<sup>2</sup>
  - 50 MHz BW
  - Rx preselect filters
  - Zynq UltraScale+ MPSOC (ZU3EG w/ Quad A53 + FPGA, 2 GB RAM, 128 GB eMMC, USB 2.0)
- Integrated +30 dBm Power Amplifier (PA), Low Noise Amplifier (LNA), and variable receiver attenuation
- 10 MHz input reference for synchronization
- Additional high speed Ethernet interface (2.5 GbE)<sup>3</sup> Powerful development tools for rapid development



High West Bottom Front View

## SPECIFICATIONS

<b>1U MOD PAYLOAD</b> (Version 5.1) compliant MAIM interface	Power	28 VDC
	Ethernet	10/100 Mbps
	RS-232	State and Console
	Time Synchronization	1 PPS
		Digital Zeroize
<b>MOUNT</b>	Wedge lock and cold plate mounting available	
<b>SIZE</b>	1.5" H x 4.29" W x 6.25" D	
<b>WEIGHT</b>	1.4 lb	
<b>POWER</b>	10 W nominal with 17 W max at 100% Tx duty cycle	

<sup>1</sup> RF chain able to incorporate future up/down converter(s) for operation > 6GHz

<sup>2</sup> Second coherent receive channel planned

<sup>3</sup> Via Mini-PCIe module. Capable of hosting other Mini-PCIe cards for other interfaces if desired.

