AXELLIO
SensorXpress

Can you afford blind spots and RF data loss?
Put the afterburner on your RF analysis system!

Go Supersonic!
Reliably analyze over 100 Gbps of RF data with your existing infrastructure, SWaP optimized to capture hours' or days' worth of data
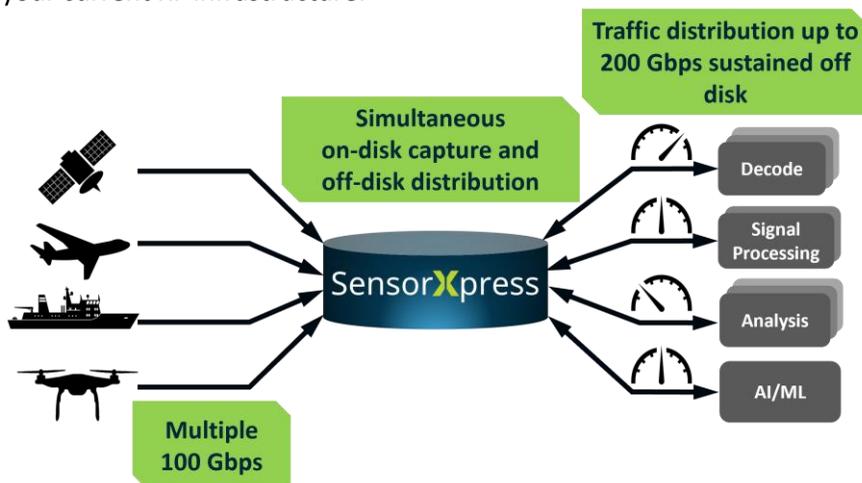
SIGINT, ELINT, & EW – Data Overload Limits Visibility

Mission demands for collecting ever-more spectrum data are overloading modern RF signal capture and processing systems. Longer time-on-target with ever wider bandwidths in increasingly dense signal environments is overwhelming storage and analysis capabilities resulting in having to limit bandwidth and data collection times. This limits visibility with Signals of Interest being missed and vital information being lost forever.

Axellio – Never Miss a Signal of Interest

Drawing on 20 years of expertise in high-speed, high-volume storage systems, Axellio developed SensorXpress® to optimize capabilities and prolong the lifespan of your current RF infrastructure:

- Software-based RF data recording and distribution solution
- Simultaneously ingests, stores, and distributes from 1 to 100s of Gbps
- Multiple analysis streams for simultaneous real-time and on-demand analysis, individually configured for content and speed
- Frequency and protocol-agnostic for ingestion, recording, and distribution, including raw I/Q or VITA49

Traffic distribution up to 200 Gbps sustained off disk

Simultaneous on-disk capture and off-disk distribution

SensorXpress

Decode

Signal Processing

Analysis

AI/ML

Multiple 100 Gbps

This Isn't Your Typical Wideband Recorder

SensorXpress® is a high-intake RF data platform that streams data **simultaneously** on and off disk to capture, store, and distribute high-speed RF data at the highest speed* and density in the industry!

23 Days at 75 MHz

983 TB Storage

17 Hours at 75 MHz

3 Hours at 400 MHz

30 TB

21 Hours at 2 GHz

- Spectrum, sensor, analysis application, and hardware agnostic
- High-speed, no loss capture and distribution in real-time and on-demand for any time series data
- Controlled and repeatable data distribution of data – from many sensors to several analysis applications
- Customizable, high-density Size, Weight, and Power (SWaP) form factors, delivered on COTS hardware
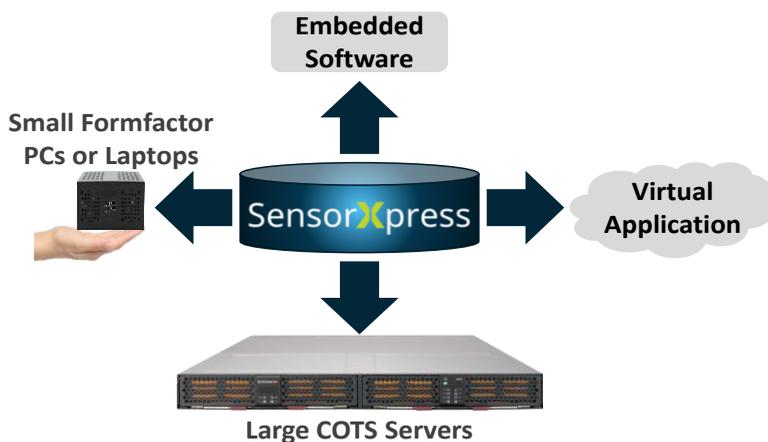
The Most Innovative RF Data Storage & Distribution Solution

This high-speed, high-volume storage system enables you to maximize the performance and capabilities of your existing collection and analysis infrastructure and prolong its lifespan:

- Record longer at wider bandwidths from more sensors
- Distribute at rates your analysis applications can safely consume
- Record and distribute simultaneously and continuously without looping

Completely Customizable to Your Mission

SensorXpress is a scalable software application that integrates with many operating systems on either custom or COTS hardware to meet your mission-specific requirements.

Embedded Software

Small Formfactor PCs or Laptops

SensorXpress

Virtual Application

Large COTS Servers

Connect with your sensors and analysis systems via standard software APIs either directly on your system or via wired or wireless networks:

- As embedded software, it allows for onboard analysis directly on your sensor platform for compact form factors in aerial or mobile platforms
- As a virtual appliance for private, government, or public cloud deployments
- In small, sometimes rugged processing platforms for front-line tactical deployments
- On COTS servers for performance and scalability in large data centers or forward operating bases

*Assumes 32 Bits Data per Sample for 120 Million Samples per Second (MSPS) for 75 MHz, 640 MSPS for 400 MHz, 3,200 MSPS for 2 GHz