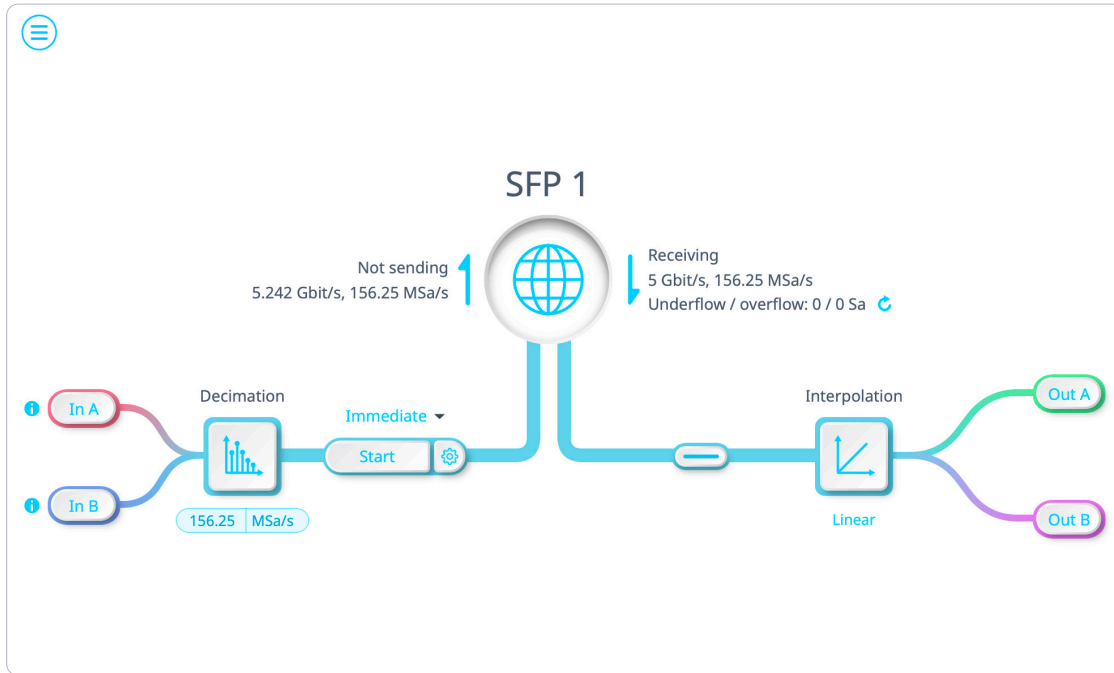




Moku Gigabit Streamer provides a fast, flexible way to transfer high-rate sample data between a Moku device and external systems. It provides dual-channel streaming at up to a 5 Gbit/s data rate, large MTU sizes, and deterministic UDP transport for reliable, low-latency performance. With both transmit and receive modes, it enables real-time capture, waveform playback, sensor signal emulation, and hardware-in-the-loop applications. The Gigabit Streamer uses a DIFI-aligned VITA 49.2 packet structure with real-valued 16- or 32-bit samples, allowing straightforward integration with existing processing pipelines. Moku Gigabit Streamer fits seamlessly into complex measurement and control setups through full integration with Multi-Instrument Mode.



<b>Data Streaming Rate</b> Up to 5 Gbit/s	<b>Sampling Rate</b> Up to 312.5 MSa/s	<b>Transmit MTU</b> Up to 1,500 bytes	<b>Receive MTU</b> Up to 1,500 bytes	<b>Transmit Sample Size</b> 16-bit or 32-bit	<b>Receive Sample Size</b> 16-bit
--	---	--	---	---	--------------------------------------

## Features

- Dual-channel reliable, continuous data streaming at a 5 Gbit/s data rate for high-bandwidth acquisition.
- Maximized throughput efficiency with large sample payloads using MTU sizes up to 1,500 bytes.
- UDP over IPv4 for deterministic, low-latency transport in real-time applications.
- Robust receive path supporting MTUs up to 1,500 bytes, with 16-bit data streams up to 312.5 MSa/s.
- Seamlessly integrates with other Moku instruments in Multi-Instrument Mode, enabling combined capture, generation, and processing in a single setup.

## Specifications

- 2x SFP ports
- Compatible with 10G SFP+ and 25G SFP28 DAC copper cables
- DIFI-aligned VITA 49.2 packet format
- Data rate: 5 Gbit/s per SFP port
- Protocol: UDP over IPv4

### Transmit

- Sampling rate: up to 312.5 MSa/s
- Network MTU: 508 bytes, 576 bytes, 1,500 bytes
- Sample size: 16 bit or 32 bit

### Receive

- Receiving rate: up to 312.5 MSa/s
- Accepted MTU: up to 1,500 bytes
- Sample size: 16 bit

## Applications

- Sensor signal emulation
- High-speed data capture
- RF event recording
- RF playback
- Real-time waveform streaming
- On-demand direct injection of real-world events
- Distributed signal processing
- Closed-loop control systems
- Hardware-in-the-loop testing
- Remote waveform generation