

Camera CoaXPress™ 3G interface module

Overview

KAYA Instrument's Camera CoaXPress 3G interface module is industry's first camera module capable of providing a high speed CoaXPress compliant communication interface. The CoaXPress interface module provides a gateway for high speed data transmission using coaxial cables and CoaXPress supporting framegrabbers for up to 200m. This module supports data rates of up to 3.125Gbps for downlink and 20.83Mbps for uplink according to CoaXPress specification. Such downlink ensures real-time, high bandwidth, consistent video stream transfer with low and latency or jitters.



The uplink is used for camera controls and triggering while benefiting from low latency and real-time response. Furthermore, the module is capable of feeding power to camera imager engine through the CoaXPress (PoCXP) support.

Features

- A compact and efficient solution for high speed video stream transmission
- Various cameras compatibility
- Real-time video transfer with low, consistent latency
- Downlink/Uplink of 3.125Gbps and 20.83Mbps respectively
- Multiple video stream support

- Up to 200m distance
- Bidirectional CoaXPress communication
- Power over CoaXPress (PoCXP) support
- 37 x 37 mm
- -40°C to 85°C operating environment temperature (industrial grade)
- Generic and adoptable to OEM customers

About CoaXPress



CoaXPress is a new digital transmission standard that allows high speed data from a device, such as a camera, to be transferred to a host, such as a frame grabber. Each CoaXPress link supports up to 6.25 Gbps data rates, along with device power up to 13W and device control at 20 Mbps – all on a single coax cable. For very fast devices, the links can be aggregated to provide multiples of the single coax bandwidth. Long cable lengths are supported – up to 40 meters at 6.25 Gbps and over 100 meters at 3.125 Gbps.



Applications

- ✓ High speed cameras
- ✓ High definition cameras
- ✓ Panoramic cameras
- ✓ Existing coax systems upgrade
- ✓ Defense remote systems
- ✓ Slip Ring systems
- ✓ Automotive surround view system
- ✓ Surveillance
- ✓ Robotic Vision

Deliverables

- Camera CoaXPress 3G interface module
- Hardware user manual
- Power supply (optional)
- Coaxial cables (optional)