



Datasheet CoaXPress Range Extender II

CoaXPress over Coax Range Extender

Innovative Approach

KAYA Instruments' **CoaXPress over Coax Range Extender** is the industry's first CoaXPress range extender. The extender increases standard CoaXPress v2.1 transmission distance while maintaining a low jitter, high resolution, and quality stream. The extender enables video, control signals, and power over CoaXPress (PoCXP) transmission for full control of the data stream and camera handle. The Range Extender is able to provide a downlink of up to 12.5 Gbps and uplink at 40.8 Mbps.

Applications:

- Sports
- Traffic
- Surveillance
- Robotics
- Machine Vision
- High-Speed Inspection
- Factory Automation
- Defence

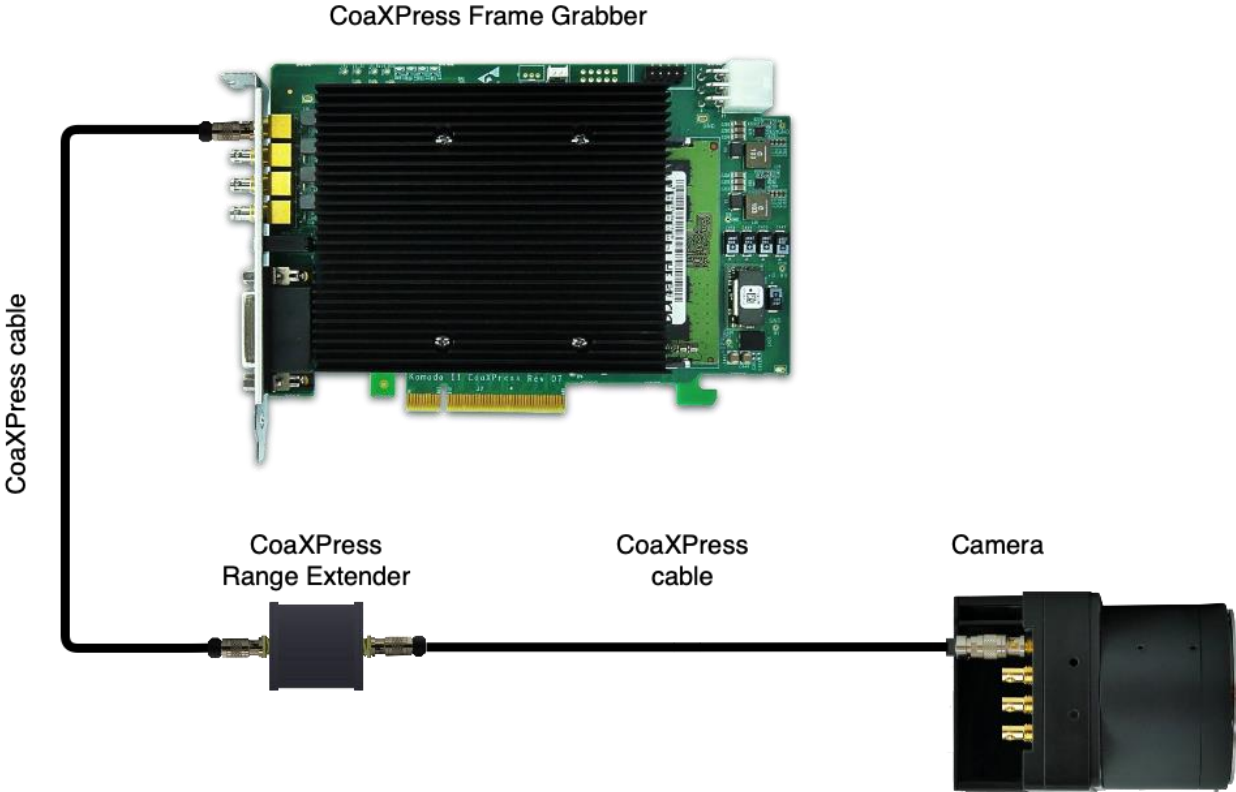
Key Features:

- CoaXPress v2.1 compatible
- Increase transmission distance of CoaXPress
- Downlink/Uplink of 12.5 Gbps and 40.83 Mbps respectively
- Bidirectional CoaXPress communication
- Micro-BNC connector for CoaXPress link
- Plug and Play, no need to configure
- Power over CoaXPress (PoCXP) support
- 0°C to 50°C operating environment temperature
- -40°C to 70°C operating environment temperature (industrial grade, optional)
- IP66 rated enclosure (optional)

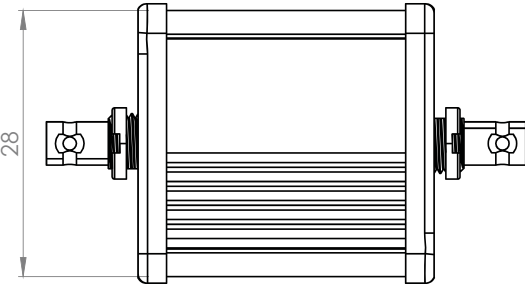
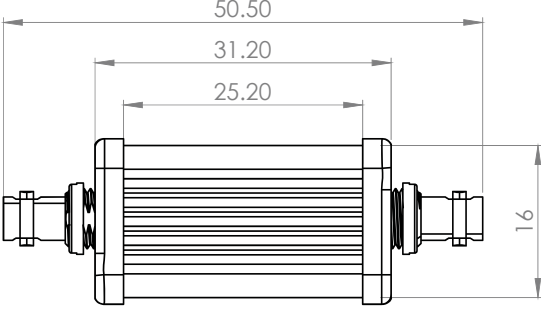
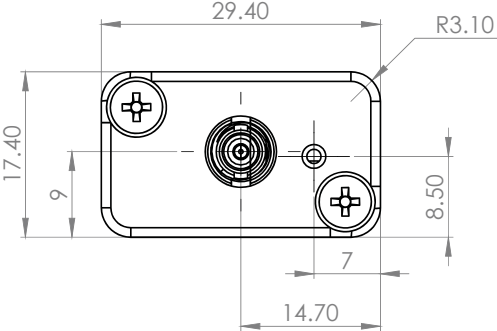
TECHNICAL DATA

| General | |
|--------------------------------------|--|
| Interface standard(s) | CoaXPress v2.1 (CoaXPress 1.1 backward compatible) |
| Connectors | 1x Micro-BNC CoaXPress v2.1 connector |
| Status LEDs | 1 System status LED |
| Number of links | 1 |
| Supported CXP down-connection speeds | <ul style="list-style-type: none">• 1.25 Gbit/s (CXP-1)• 2.5 Gbit/s (CXP-2)• 3.125 Gbit/s (CXP-3)• 5 Gbit/s (CXP-5)• 6.25 Gbit/s (CXP-6)• 10 Gbit/s (CXP-10)• 12.5 Gbit/s (CXP-12) |
| Cooling method | Air cooling, passive heatsink |
| Dimensions | 50.5 mm x 29.4 mm x 17.4 mm (1.99" x 1.15" x 0.68") |
| Weight | 24 g (0.84 oz) |
| PoCXP (Power over CoaXPress) | Yes |
| Environmental conditions | |
| Operating case temperature | -40 °C to +70 °C (+-40 °F to +158 °F) |
| Operating ambient air humidity | 10% to 90% RH non-condensing |
| Storage ambient air temperature | -40 °C to +80 °C (-40 °F to +176 °F) |
| Storage ambient air humidity | 10% to 90% RH non-condensing |
| Shock/Vibration | - |
| Certifications | |
| Electromagnetic - EMC standards | <ul style="list-style-type: none">• The European Council EMC Directive 2004/108/EC• The United States FCC rule 47 CFR 15 |
| EMC - emission | <ul style="list-style-type: none">• EN 55022:2010 Class B• FCC 47 Part 15 Class B |
| EMC - immunity | <ul style="list-style-type: none">• EN 55024:2010 Class B• EN 61000-4-3• EN 61000-4-4• EN 61000-4-6 |
| Flammability | PCB compliant with UL 94 V-0 |
| RoHS | Compliant with the European Union Directive 2011/65/EU (ROHS2) |
| REACH | Compliant with the European Union Regulation No 1907/2006 |
| WEEE | Must be disposed of separately from normal household waste and must be recycled according to local regulations |
| Ordering information | |
| Part Number | KY-EXT-II |
| Optional accessories | CoaXPress cables |

SYSTEM DIAGRAM



MECHANICAL DRAWINGS



COMPATIBILITY

KAYA Instruments creates and maintains compatibility and interfaces for the most common and advanced vision image processing libraries and applications. Major support is available for **MVtec Halcon**, **National Instruments' LabVIEW** and **MathWorks' MATLAB**.

Supported vision standards:



Supported vision libraries:



Supported operating systems:



Please check our website for an up-to-date list of other supported libraries and software package

International Distributor



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KAYA Instruments

Please feel free to contact our sales team for pricing, availability, documentation or customization at our e-mails – we will be happy to provide assistance and consultation.



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