

# Datasheet CoaXPress Range Extender



## CoaXPress over Coax Range Extender II

KAYA Vision is a global leader in commercial, industrial and rugged cameras and imaging system solutions, providing high-performance products for over 15 years. Founded in 2010 by industry experts, KAYA designs, manufactures and supports both COTS and custom products for high-performance imaging needs.

KAYA Vision 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. It enables video, control signals, and (PoCXP) power over CoaXPress 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. Supports three KY-EXT-II in-line repeating 20 m extenders each up to 80 m in total.

挿入するだけで通信改善。 簡単で便利な KT-EXT-II お問い合わせは立野電脳(株)

#### **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)

#### **Applications:**

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



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## **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> <li>1.25 Gbit/s (CXP-1)</li> <li>2.5 Gbit/s (CXP-2)</li> <li>3.125 Gbit/s (CXP-3)</li> <li>5 Gbit/s (CXP-5)</li> <li>6.25 Gbit/s (CXP-6)</li> <li>10 Gbit/s (CXP-10)</li> <li>12.5 Gbit/s (CXP-12)</li> </ul>
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	The European EMC Directive 2014/30/EU
	The Unites States FCC rule 47 CFR 15
EMC - emission	• EN 55032:2015 Class B
	FCC 47 Part 15 Class B
EMC - immunity	• EN 55035:2017 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

お問い合わせは立野電脳(株) sales@dsp-tdi.com



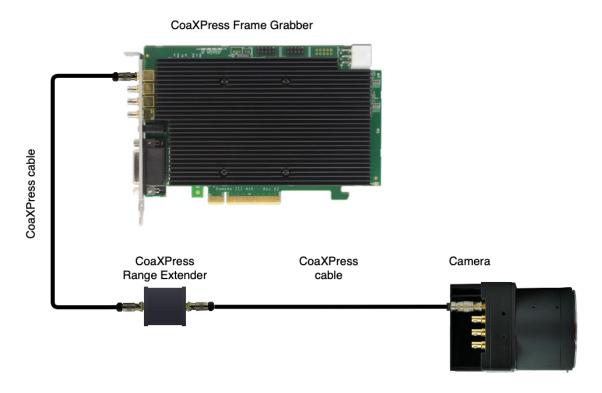
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### SYSTEM DIAGRAM

Single link topology:



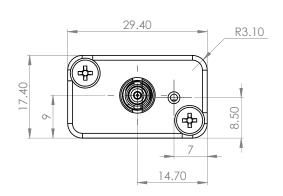
Single link topology with multiple Range Extenders usage:

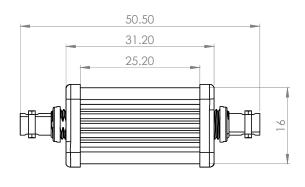


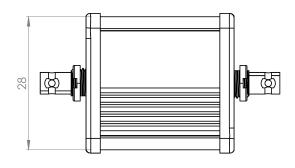
NOTE: When used on non PoCXP compatible camera links, a PoCXP must be turned on manually on frame grabber for those links.

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## **MECHANICAL DRAWINGS**









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#### COMPATIBILITY

KAYA Vision develops and maintains compatibility and interfaces for the most common and advanced vision image processing libraries and applications. We ensure seamless integration with major platforms to provide users with a flexible and convenient development environment, minimize integration effort, and accelerate time to deployment.

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

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Have questions about pricing, availability, documentation, or custom options?

We're always ready to assist and provide expert guidance.

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