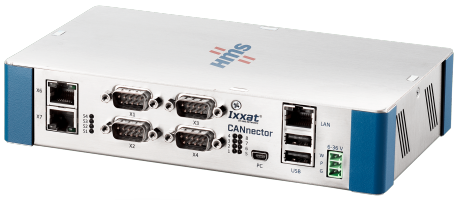
DATASHEET

CANnector



The Ixxat CANnector is a versatile communication platform designed to centralize and simplify your communication needs. Equipped with multiple interfaces, it seamlessly integrates several bus systems into a single device – ideal for logging and gateway applications.

This intelligent device operates independently, only requiring a PC for initial configuration or for data visualization. The core capabilities, such as transport protocols, are outsourced to the platform and freeing up PC resources.

By combining various functionalities, interfaces and expansion options, the CANnector offers an adaptable solution that can be tailored to a wide array of customer-specific applications.

The Advanced Configuration Tool (ACT) allows for easy device configuration via drag-&-drop, addressing most use cases with its freeware version.

FEATURES AND BENEFITS

- **Multi-connectivity:** Embedded platform with various interfaces and use cases
- **CAN/CAN FD in one device:** Up to 8 x CAN channels in one device (4 x CAN + up to 4 x additional CAN/CAN FD channels)
- **Additional interfaces:** variants with EtherCAT, Ethernet, LIN, Digital in/out (A/E), USB 2.0 device and USB 2.0 host support
- **Low latency:** Near-zero delays in gateway applications
- **High protection:** Up to 2 kV galvanic isolation for secure operations
- **Various access options:** USB and LAN connectivity for flexible access
- **Easy cloud access:** Streamlined data storage and retrieval
- **User-friendly:** Plug-and-play device with custom configuration options
- **Standalone functionality:** Works independently, ensuring reliability
- **Easy Installation:** DIN rail mountable for quick setup

Available variants:
CANnector S (1.01.0091.00000), CANnector SE (1.01.0091.00100), CANnector L (1.01.0091.00010), CANnector LE (1.01.0091.00110), CANnector LA (1.01.0091.00011)

TECHNICAL DATA	CANNECTOR S	CANNECTOR L	CANNECTOR SE	CANNECTOR LE
ORDER NUMBER	**1.01.0091.00000**	**1.01.0091.00010**	**1.01.0091.00100**	**1.01.0091.00110**
Galvanic isolation	yes			
CAN FD/CAN channels	6	8	6	8
CAN bus interface	4 x D-Sub 9, CiA standard pinning according to CiA 303-1			
CAN bus termination resistors	CAN/CAN FD: none			
Galvanic isolation	up to 2 kV DC for 1 sec.			
LIN channels	2			
Ethernet interfaces	1			
Ethernet connector	3 x RJ45 (1 x Ethernet 10/100 Base-T, 2 x fieldbus)			
EtherCAT (slave)	-	-	Yes. Connector X6 provides EtherCAT-Slave-OUT and X7 provides EtherCAT-Slave-IN functionality.	Yes. Connector X6 provides EtherCAT-Slave-OUT and X7 provides EtherCAT-Slave-IN functionality.
USB interface	1 x Mini USB device interface, 2 x USB 2.0 host interface (480 Mbit/s)			
USB connector	1 x Mini USB, 2 x USB Type-A			
USB 2.0 host	2			
Host system	Power PC, 256 MByte RAM, 256 MByte Flash			
Power supply	6 to 36 V DC (via WPG connector)			
Power consumption	420 mA (12 V DC), sleep mode: 7.5 mA (12 V DC)			
Weight	Approx. 790 g			
Housing material	Aluminum, stainless steel			
Dimensions	196 x 113 x 43 mm			
Operating temperature	-40 °C to +80 °C			
Storage temperature	-40 °C to +85 °C			
Protection class	IP40			
Relative humidity	10-95 %, non-condensing			
LED	8 x LEDs, of which 7 are freely configurable			
Certification	CE			

CERTIFICATES

CE

ACCESSORIES	ORDER NUMBER
Power cable for CANnector	1.04.0089.00002
CAN/LIN/K-Line Breakout Cable (1.5 m)	1.04.0089.00200
Double CAN Cable	1.04.0089.00201
USB WiFi Extension	1.04.0143.00000
CAN cable 2.0 m (D-Sub plug to socket)	1.04.0076.00180

PIN ALLOCATION

Field Bus Interfaces

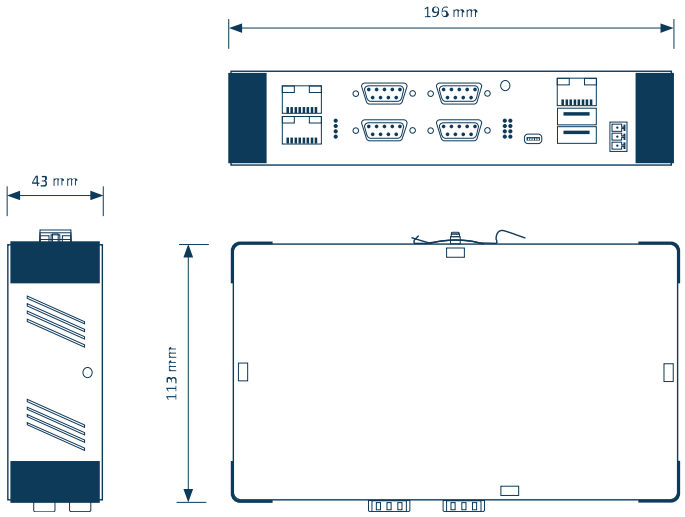
X1 CAN high-speed, CAN FD (only CANnector L, LA, LE), LIN
X2 CAN high-speed, CAN FD (only CANnector L, LA, LE), Digital I/O 1
X3 CAN high-speed, CAN FD, LIN
X4 CAN high-speed, CAN FD, Digital I/O 2

EtherCAT Interfaces (only selected variants)

X6 EtherCAT-Slave-OUT
X7 EtherCAT-Slave-IN

The detailed pin allocation is dependent on the device variant. Further information can be found in the user manual.

TECHNICAL DRAWING



SOFTWARE SUPPORT

The CANnector provides various possibilities to manage configurations. HMS provides with Ixxat ACT (Advanced Configuration Tool) an easy to use Windows-based tool enabling customers to configure the device via drag-and-drop. Most use-cases can be solved by using ACT Freeware.

Dashboard

With the dashboard, that is accessible via the IP address and a web browser, the state of the CANnector and the connected bus systems can be monitored, the different basic configurations can be selected and downloaded to the device, and data can be visualized.

ACT Tool

The engineering tool ACT is Windows based and allows the easy creation of configurations via drag-and-drop. The ACT tool provides further configuration possibilities (e.g. forwarding individual signals, changing message ID and content).

IxAdmin

IxAdmin is included in the ACT. With IxAdmin the different basic configurations can be selected, started and stopped and downloaded to the device. Changing baud rate settings is also possible as well as updating the firmware and managing the connected devices.