

Ixxat T100/FSoE Development Kit

Item number: 029830-A

The Ixxat Safe T100/FSoE offers an easy way to implement safe I/O signals into industrial devices, using the Functional Safety over EtherCAT (FSoE) protocol. The Development Kit is an all-in-one solution for evaluation purposes, featuring essential components like a base board with an Anybus CompactCom module, CPU, and a safety module.



Safe communication through Functional Safety over EtherCAT (FSoE)

Features and benefits

✓ **High safety level assurance**

The module meets the SIL3 safety requirement level as defined by IEC 61508 and Performance Level PLe / Category 4 in ISO 13849-1, ensuring a high standard of safety and reliable performance.

✓ **Advanced safety protocol integration**

For FSoE, the CompactCom handles EtherCAT Slave functions, while the safety module manages the FSoE layer, controlling three dual-channel inputs and one dual-channel output.

✓ **Flexible I/O configuration**

Offering support for both single and dual-channel use, the Ixxat Safe T100/FSoE provides a high degree of flexibility.

✓ **Simplified certification**

Easy device certification of Safe T100-based end products thanks to the comprehensive safety manual, along with a clear separation of safety-relevant functions from unsafe functions of the end device.

✓ **Customized communication integration**

The Ixxat Safe T100 module can be connected to custom non-safe communication solutions by granting it access to the transport layer. This allows for seamless integration with a variety of systems.

✓ **Enhanced network compatibility**

The module offers direct connectivity with the Anybus CompactCom, leveraging the black channel principle and enabling seamless communication for both safe and non-safe protocols on the same wire.

✓ **Comprehensive development kit**

Ixxat T100/FSoE Development Kit features an EtherCAT Anybus CompactCom module, a host CPU and suitable safety module. The configuration of the Safety I/Os is done via the fieldbus connection.

✓ **Efficient pre-certified concept**

The module integrates all necessary functions for achieving SIL-3/PLe compliance on one device. It is equipped with pre-certified hardware and a comprehensive documentation for easy re-certification.

✓ **Compact and integrative design**

Its compact size coupled with flexible I/O routing makes the module ideal for integration into customer-specific device solutions.



Identification and Status

Product ID	029830-A
Country of Origin	Sweden
HS Code	8517620000
Export Control Classification Number (ECCN)	EAR99

General

Net Weight (g)	34
Packed Width (mm)	12
Packed Height (mm)	2
Packed Depth (mm)	8
Packed Weight (g)	50
Operating Temperature °C Min	-30 °C
Operating Temperature °C Max	68 °C
Input Voltage (V)	24 V DC (SELV/PELV), 3.3 V DC
Content of Delivery	Safe T100 Development Kit, user manual
Packaging Material	Cardboard

Physical Features

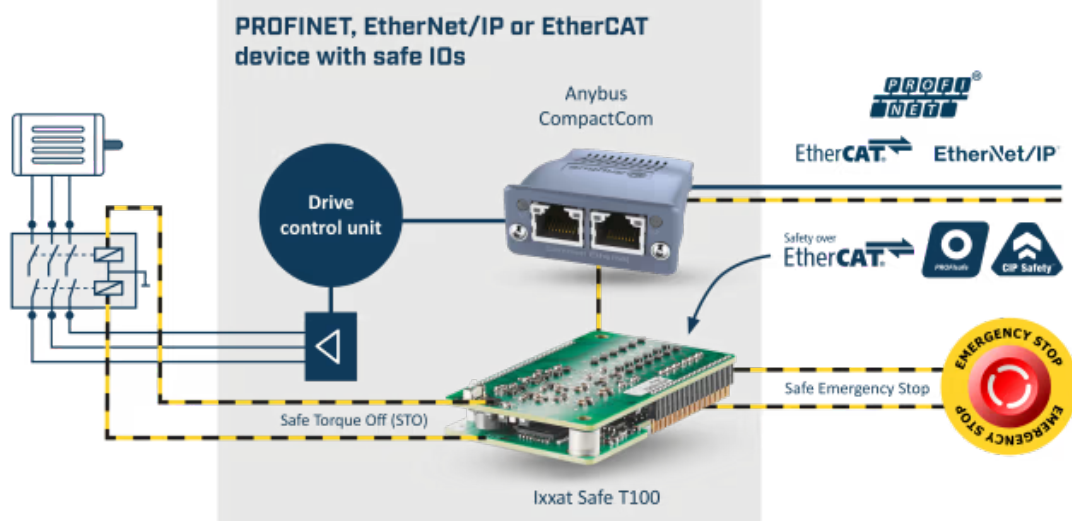
Connectors / Input / Output	3 x Digital Inputs (3 x dual channel, configurable with filter and monitor functions), 1 x Digital Output (1 x dual channel, configurable), 30-pin male connector (electrical connectivity between the customer device and the Safe T100 device), 2 x RJ45 connectors
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Certifications and Standards

ETIM Classification	EC001599
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Use Case



The Ixxat Safe T100 module is primarily designed to be used together with Anybus CompactCom, where the safety communication uses the black channel principle through Anybus CompactCom. The CompactCom performs the tasks of a fieldbus node according to the selected protocol, while Safe T100 includes the safety layer and safe control of three dual-channel inputs as well as one dual-channel output. It is also possible to connect Safe T100 to your own unsafe communication solution – giving T100 access to the transport layer in your solution.