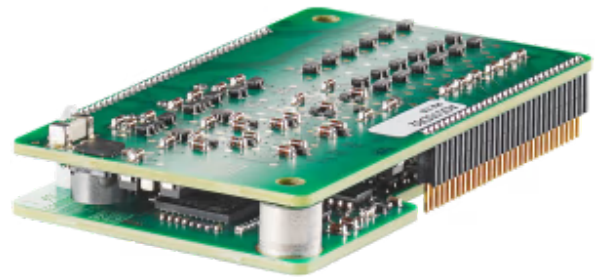# Ixxat Safe T100/FSoE

Item number: 1.01.0302.00001

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. It is a compact module, offering top-tier safety (SIL-3/PLe) and simplified certification, perfectly suited for custom industrial applications with both safe and non-safe communication needs.

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.

✅ **Effient 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.

✅ **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.

✅ **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.

Ixxat Safe T100/FSoE

General

Net Weight (g)	25
Packed Weight (g)	25
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 module, user manual
Packaging Material	Cardboard

Identification and Status

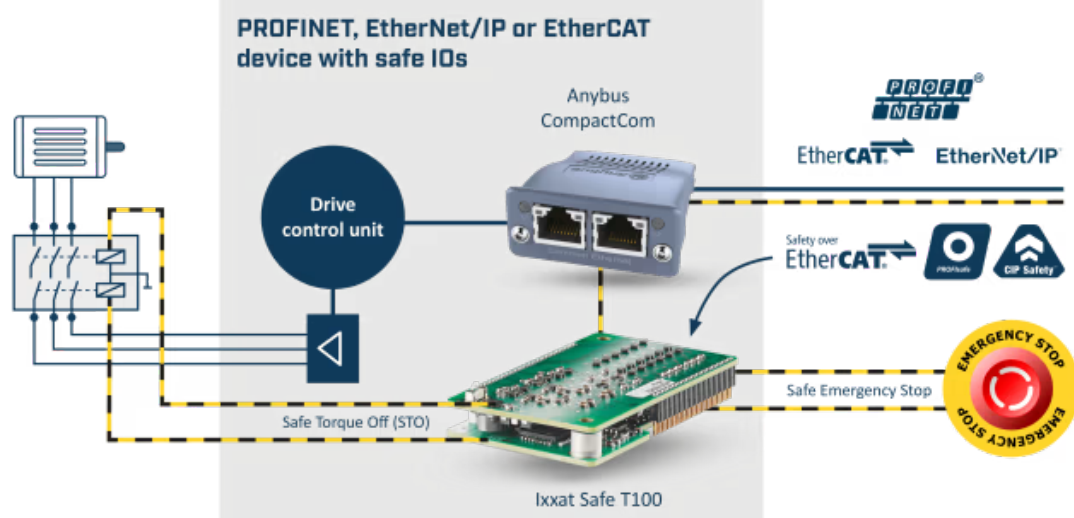|	
Product ID	1.01.0302.00001
Country of Origin	Sweden
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	EAR99

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)
Contains Battery	No

Certifications and Standards

ETIM Classification	EC001599
TÜV	Yes

Use Case

PROFINET, EtherNet/IP or EtherCAT device with safe IOs

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 fielbus node accoring 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.