



Flexi Net

Safety controller for stationary and mobile machine architectures

SICK
Sensor Intelligence.



Technical data overview

Safety level	PL e, SIL 3
Configuration method	Via software (Safety Designer)
System construction	Modular 1 main module Up to 12 expansion modules (including a maximum of 4 gateways, 2 of which are secure gateways) The gateway and IO extension modules can be arranged arbitrarily. 0 ... 12 expansion modules (excluding maximum 1 gateway) (depends on variant)
Fieldbus, industrial network	CANopen, EtherCAT®, PROFINET (depends on variant)
Safe series connection with Flexi Loop	Flexi Loop

Product description

Flexi Net is a powerful safety controller for modern machine architectures. The scalable control architecture enables the addition of up to 12 Flexi I/O modules and the creation of a secure machine network along the production line. With up to 512 TÜV-certified function blocks and a cycle time of just 4 ms, Flexi Net offers high performance up to performance level e. Sensors can be integrated into the safety controller in a variety of ways – thanks to EFI-pro and Flexi Loop. Safe Motion via integrated HTL inputs and application-specific function blocks meets the requirements of mobile robots. Live diagnostics, together with central configuration via the Safety Designer, ensure fast commissioning and easy maintenance.

At a glance

- Main module expandable with twelve Flexi I/O modules
- Powerful logic with up to 512 function blocks
- Secure communication via EFI-pro
- Safe Motion via HTL interface and CAN lists
- Response time (Fast shut off): 4.5 ms
- Supports common fieldbuses
- Compatible with Safety Configuration Deployment and Flexi Loop

Your benefits

- Adaptive and future-proof for stationary and mobile requirements
- Individual safety solutions thanks to configuration in the Safety Designer
- Simple sensor integration and control networking thanks to secure communication along the production line
- Cost-efficient, safe movement monitoring thanks to TÜV-certified function blocks and predefined safety functions
- Compact machines thanks to short distance to hazardous points
- Seamless integration into standard machine controllers for comprehensive diagnostics
- Fast configuration transfer and commissioning
- Reduced wiring and number of inputs thanks to safe series connection

Fields of application

- Scalable safety solution in production logistics
- Machines for material handling
- Dynamic processes with safe drive monitoring for mobile robots
- Modular and networked machines in the packaging and consumer goods industry
- Automated manufacturing processes in the electronics industry

Ordering information

Other models and accessories → www.sick.com/Flexi_Net

Main modules

Connection type	Fieldbus	Type	Part no.
Front connector with spring terminals	Modbus [®] TCP	FLX3-CPUN100	1085359

Gateways

Fieldbus	Type	Part no.
CANopen	FLX0-GCAN100	1085363
EtherCAT [®]	FLX0-GETC100	1085357
PROFINET TCP/IP sockets	FLX0-GPNT100	1085356

I/O modules

Connection type	Inputs/outputs	Type	Part no.
Front connector with spring terminals	8 safety inputs 8 safety outputs	FLX3-XTD0100	1085354
	8 safety inputs 8 test outputs	FLX3-XTDI100	1085353

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com