



Flexi Mobile

The safety controller for mobile robots

SICK
Sensor Intelligence.

Advantages



Rugged and smart device design for efficient production processes

SICK developed the Flexi Mobile safety controller for the series production of mobile robots. You can integrate it quickly and easily into many different AGVs and AMRs. This significantly reduces the cost of producing them. The Safety Configuration Deployment software speeds up the transfer of verified Safety Designer configurations to series-produced mobile robots.



The safety controller can be integrated into AGVs and AMRs without a control cabinet to save space. Flexi Mobile has a rugged aluminum housing and is therefore an ideal solution for indoor and outdoor applications.



Rectangular plug connectors for pre-assembled cable harnesses make electrical installation of the safety controller quick and reliable.



Streamline your production processes for AGVs and AMRs

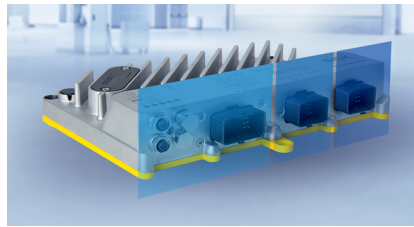


Flexi Mobile supports the customization of mobile robots

Flexi Mobile makes it easy to respond flexibly to customer requirements and tailor mobile robots to individual applications. The modular structure of the safety controller makes it easier for you to implement specific solutions and accelerates the design and engineering of AGVs and AMRs. In other words: great design freedom meets short development times for mobile robots.



TÜV-certified function modules with pre-developed safety functions enable fast engineering with low resource usage.



You only pay for what you need: Flexi Mobile can be adapted to the respective application-specific requirements in a cost- and space-saving manner via various extension modules.



One software for many safety devices from SICK: With Safety Designer, safety applications can be developed intuitively and quickly. Simulation and data recorder simplify troubleshooting.



Save time and money when designing and engineering your AGVs and AMRs



Efficient in use thanks to adaptive safety solutions

Processes with a high degree of automation must be flexible and at the same time protect people – both indoors and outdoors. This is exactly what Flexi Mobile does: The safety controller ensures your applications are safe, and your industrial vehicles reach their destination faster – and achieve more.



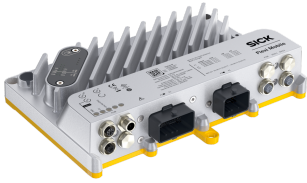
Adaptive safety concepts with Safe Motion functions ensure safe collaboration between humans and mobile robots, even in situations where space is limited.



Coming soon: The EFI-pro safety system enables an efficient interaction between sensors and controllers. This allows AGVs and AMRs to respond to changes in their environment in an even more granular way and work particularly productively.



Increase the speed and performance of AGVs and AMRs with Flexi Mobile



Technical data overview

Safety level

PL e, SIL 3

Product description

The Flexi Mobile safety controller is the answer to safety requirements for dynamic mobile robots. With the rugged aluminum housing and a smart installation concept, you can integrate Flexi Mobile into AGVs and AMRs in a space-saving manner. An additional control cabinet is not required. Certified function blocks ensure high cost-effectiveness right from the engineering stage of the mobile robots. Configuration, commissioning and diagnostics are quick and easy using the intuitive Safety Designer software. The safety functions of Flexi Mobile, which have been specially developed for mobile robots, enable high productivity in automation processes – both indoors and outdoors. EFI-pro communication ensures safe and easy networking of the components.

At a glance

- Rugged, shock and vibration-resistant IP66, IP67 and IP69K rated housing
- Rectangular plug connector
- TÜV-certified function blocks
- Integrated Safe Motion functions
- Intuitive Safety Designer configuration software
- Automated transfer of the Safety Designer configuration
- Industrial Ethernet-based network technology (EFI-pro)

Your benefits

- Integrate Flexi Mobile quickly and space-savingly into mobile robots without a control cabinet
- The connector concept ensures a reliable electrical installation and supports the series production of mobile robots
- Thanks to specific function blocks, you can accelerate the development of AGVs and AMRs while meeting standard and application requirements
- Safe kinematics help you increase productivity even in confined spaces
- Configure Flexi Mobile and other SICK safety components in a single software application
- EFI-pro increases the performance of AGVs with very fast and precise protective field adjustment

Fields of application

- Environment perception and safe movement monitoring for AGVs and AMRs in indoor and outdoor areas
- Mobile machines
- Extensive infrastructures, e.g., conveyor belts in mining

Ordering information

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

Communication interface	Safety inputs	Safety outputs	Type	Part no.
Ethernet, Modbus® TCP, SLMP	28	12	FLM3-CPUN100A01	1117015
	36	20	FLM3-CPUN100A02	1117018
Ethernet, Modbus® TCP, SLMP CAN, CANopen	28	12	FLM3-CPUN100A03	1118655
	36	20	FLM3-CPUN100A04	1118656
Ethernet, Modbus® TCP, SLMP CAN, CANopen EFI-pro, EtherNet/IP™ CIP Safety™, TCP/IP-Sockets	20	4	FLM3-CPUN100A16	1138654
	28	12	FLM3-CPUN100A06	1130366

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