



DCM4-AA100A0A0

DCM4

SYSTEM PLUGS AND EXTENSION MODULES

SICK
Sensor Intelligence.



Ordering information

Type	part no.
DCM4-AA100A0A0	1125888

Other models and accessories → www.sick.com/DCM4



Detailed technical data

Features

Description		The DCM4 extension module extends the functional scope of an electro-sensitive protective equipment (ESPE). The extended functional scope of the ESPE is referred to as function package DCM4. The extension module has several inputs to which the ESPE and other devices or sensors can be connected.
Compatible devices		deTec4, deTem4, deTem4 A/P for a specific version number or higher (functional scope)
deTec4 safety light curtain		
	Sender	V1.1.0 or higher
	Receiver	V1.3.0 or higher ¹⁾
deTem4 safety light-beam sensor		
	Sender	V1.0.0 or higher
	Receiver	V1.0.0 or higher
deTem4 A/P safety light-beam sensor		
	Active unit	V1.1.0 or higher
Items supplied		DCM4 extension module USB protective cover Protective caps for M12 round connectors Safety instruction Mounting instructions Operating instructions for download Safety Designer configuration software for download

¹⁾ From V1.2.0 compatible with reduced functional scope. From V1.3.0 with full functional scope.

Safety-related parameters

Type	Type 4 (IEC 61496)
Safety integrity level	SIL 3 (IEC 61508, IEC 62061)
Category	Category 4 (ISO 13849)
Performance level	PL e (ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	3.5 x 10 ⁻⁹
T_M (mission time)	20 years (ISO 13849)

Functions

Note	The scope of the function package DCM4 depends on the connected ESPE.
deTec4 safety light curtain	Beam coding Restart interlock Smart restart interlock External device monitoring (EDM) Application diagnostic output (ADO) Cascading Smart presence detection Reduced resolution (Basic) Reduced resolution (Advanced) Manual adjustment of the protective field width Transmitting power adjustment Muting (2-signal muting) Partial muting Operating modes Configurable multiple sampling Smart Box Detection Fixed blanking Teach-in for fixed blanking Floating blanking Object pattern recognition
deTem4 safety light-beam sensor	Beam coding Restart interlock External device monitoring (EDM) Application diagnostic output (ADO) Manual adjustment of the protective field width Transmitting power adjustment Muting (2-signal muting) Partial muting Operating modes
deTem4 A/P safety light-beam sensor	Beam coding Restart interlock External device monitoring (EDM) Application diagnostic output (ADO) Muting (2-signal muting) Operating modes

Interfaces

System connection	Male connector M12, 8-pin
Sender connection	Female connector M12, 8-pin
Receiver connection or active unit	Female connector M12, 8-pin
Configuration and diagnostics	USB 2.0 Type-C
Configuration method	Via software (Safety Designer)
Display elements	Status LED

Electronics

Protection class	III (IEC 61140) ¹⁾
Supply voltage V_S	24 V DC (19.2 V ... 28.8 V) ^{2) 3) 4)}
Residual ripple	≤ 10 % ⁵⁾

¹⁾ The system must be supplied with SELV/PELV in accordance with IEC 60204-1.

²⁾ The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in IEC 60204-1. Suitable power supplies are available as accessories from SICK.

³⁾ A fuse rated maximum 4 A must be installed in the 24 V DC power supply circuit to the device in order to limit the available current.

⁴⁾ All inputs of the connected system must be supplied by the same voltage supply.

⁵⁾ Within the limits of V_S.

Mechanics

Dimensions (W x H x D)	69.8 mm x 48 mm x 18 mm
Mounting	The extension module can be mounted either using a cable tie or a C-Fix bracket.

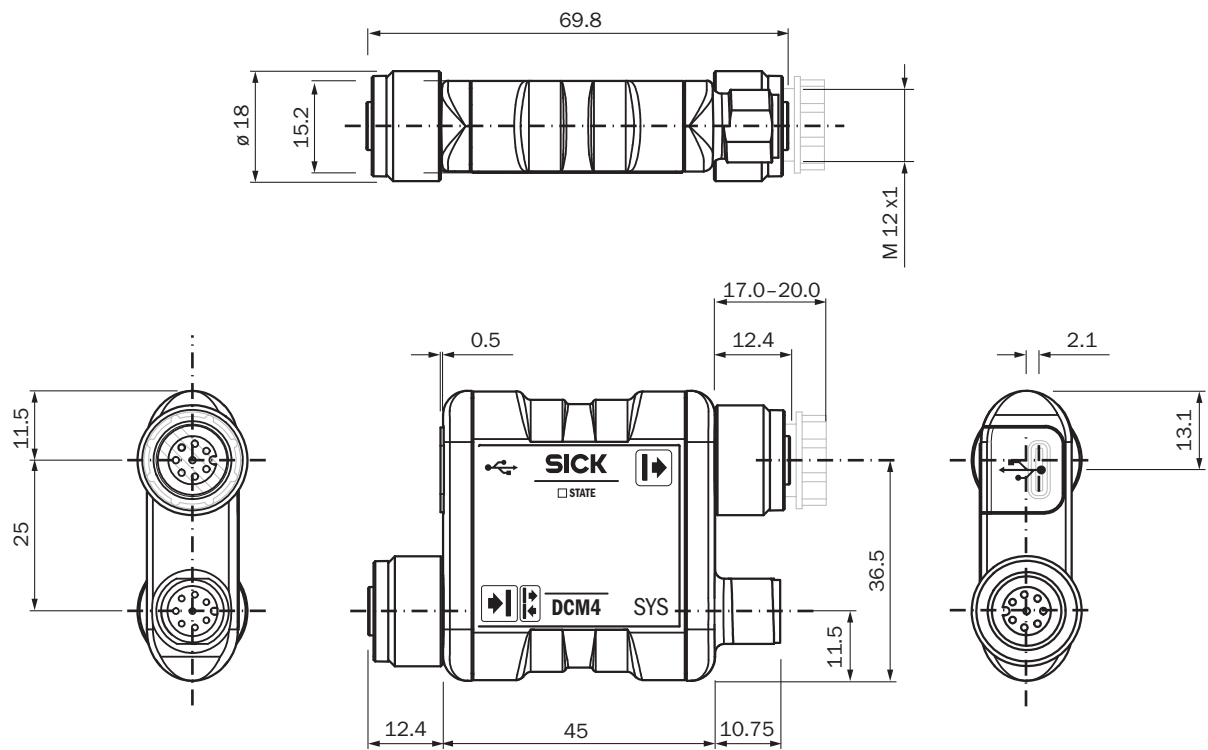
Ambient data

Enclosure rating	IP65 / IP67 (IEC 60529)
Ambient operating temperature	-30 °C ... +55 °C
Storage temperature	-30 °C ... +70 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 ... 150 Hz, 3,5 mm / 1 g (EN 60068-2-6)
Shock resistance	15 g / 6 ms (EN 60068-2-27)
Class	3M4 (IEC TR 60721-4-3)
EMC	According to IEC 61496-1, IEC 61000-6-2, IEC 61000-6-4

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
ULus approval	✓
cUL approval	✓
EC-Type-Examination approval	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Dimensional drawing



Dimensions in mm (inch)

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