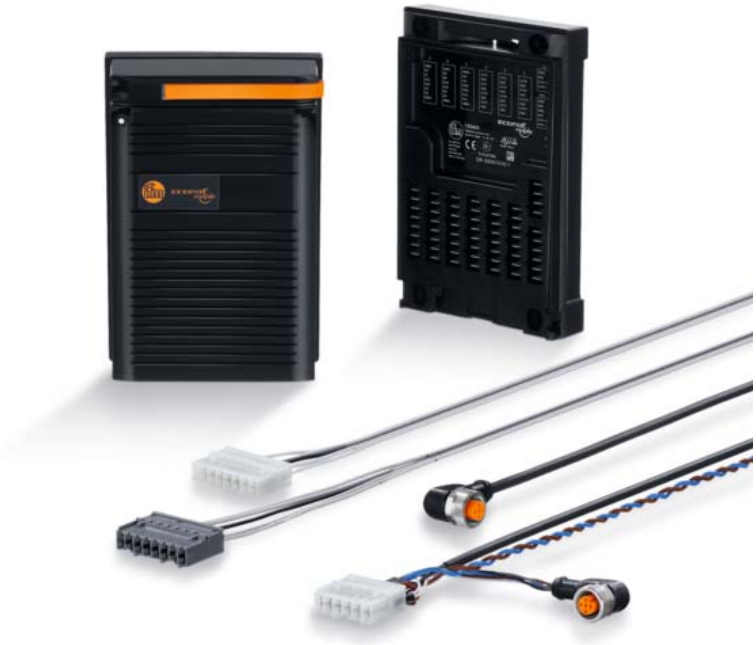
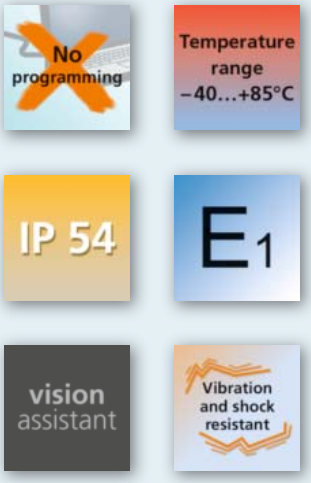
I/O module for 3D camera system O3M for mobile use

Cameras for mobile applications



- **Extends the camera system adding binary and analogue inputs and outputs**
- **Easy retrofitting on mobile machines without a bus system**
- **User-friendly parameter setting with the ifm Vision Assistant**
- **Including CAN jumper cables and all required adapter cables**



Easy extension for additional inputs and outputs

The O3M 3D camera system is provided by default with a CAN connection for integration in mobile machines, on which this bus is often installed. On machines without CAN bus, the new I/O module can be connected directly to the 3D camera by means of the supplied connection cable. The module extends the system adding binary and analogue inputs and outputs, which can then be connected to a controller without a bus system.

Intuitive parameter setting and programming

The I/O module is pre-programmed and ready for use. Easy parameter setting or complex logic programming allow the module to be adapted to the individual application by means of a user-friendly graphic function block diagram in the "Vision Assistant" software.

Features and benefits

Inputs and outputs for O3M 3D camera system

The I/O module extends the 3D system O3M, which by default only features one CAN connection and one Ethernet connection, via additional binary and analogue inputs and outputs. In total, the I/O module provides 2 analogue inputs (0...32000 mV), 10 binary inputs, 1 PWM output and 11 binary outputs, which are all pre-programmed.

A CAN bus allows for connection of the I/O module to the 3D system. The pre-assembled jumper cable as well as the connection cables for the inputs and outputs are supplied with the module.

Parameter setting and logic creation

Parameter setting of the 3D system and logic creation is done via the ifm Vision Assistant. The I/O module does not require any programming. The logic is represented graphically in a kind of function block diagram in the Vision Assistant.

It can consist of simple AND/OR functions but it can also involve arithmetic operations with memory options.

Easy retrofitting

The I/O module is perfectly suited for retrofitting 3D systems on existing mobile machines or industrial plants, which do not feature a CAN bus. It just requires connecting the module's inputs and outputs to the existing system in order to allow, for example, for control of acoustic or optic signal generators and actuators.

In industrial plants, connection to the existing PLC is achieved via the I/O module's binary outputs. This considerably simplifies the integration of the 3D camera system.

Products

Description	Order no.
Complete set	
I/O module for camera systems	**ZZ1102**
Contents of the complete set	
BasicController 12 I / 12 O, programmable controller with multifunctional input and output channels **(In the complete set, this article is pre-programmed. If BasicController is purchased on its own, there is no pre-programming.)**	**CR0403**
Module cover IP 54 without display recess, with cable seal	**EC0401**
CAN adapter cable for the connection and voltage supply of O3M, CR0403 and CR0451, 10 m	**E3M171**
Connection cable for BasicController CR04xx, inputs A/B/C, 1.5 m	**EC9206**
2 x connection cable for BasicController CR04xx, outputs D/E/F, 1.5 m	**EC9207**

Technical data BasicController CR0403		
Housing		plastic, potted
Device connection		AMP blade male terminals 6.3 mm
Protection rating, with cover EC0401, EC0402		IP 20 IP 54
Operating voltage	[V DC]	8...32
Current consumption	[mA]	≤ 45 (at 24 V DC)
Temperature range	[°C]	-40...85
Indicators	LED	red/green
Processor		PowerPC, 50 MHz
Data memory SRAM	[kB]	592
Data memory Flash	[kB]	1536
Data memory (retain), FRAM	[kB]	1
Digital inputs (in total): Number of analogue inputs Number of frequency inputs Number of resistor inputs		12 4 4 4
Digital outputs (in total): Number of PWM outputs Number of PWM-I outputs		12 10 2
Supported CAN protocols		CANopen (DS 301 V4.1) SAE J 1939 free CAN protocol
Programming software		CODESYS V 2.3
Standards and tests (extract)		CE, E1 (UN-ECE R10)