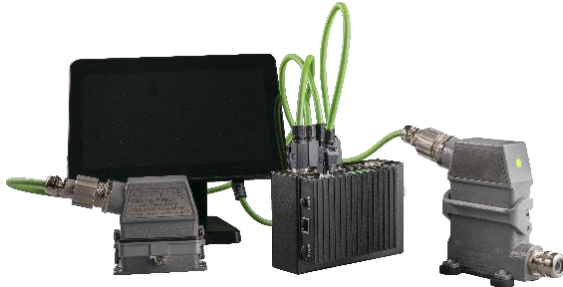


MOLDi Datasheet

Applicable model: MOLDi8/16/32/64
Models distributed from 01.01.2024.



1. Description

MOLDi from Cavity Eye is a process and production monitoring system that alongside data collection and visualization also participates in the separation of faulty products.

The system helps to find the optimal technology based on cavity pressure measuring and supervises production by processing a wide range of data.

The self-developed software displays and saves the data at the central unit. Data collection is made by the Smart Measuring Plug (SMP), the Smart Flow Plug (SFP), and the Smart Control Plus (SCP).

In addition to collecting the machine's analog signals, SCP communicates with the machines via digital signals.

2. Application

It is possible to supervise the production based on cavity pressure measurement and tempering fluid flow measurement.

It has a rather durable design that meets the demands of the industry, it's specifically designed for use in industrial environments.

3. Operation

The processing and forwarding of pressure sensor signals are made by the participating of the SMP measuring instrument. The signals of the sensors are received by the device and transmitted via UTP cable to the central unit where the software processes them.

The signals of the pressure sensors are directly proportional to the force acting on the measuring pin. The software determines the pressure conditions by knowing the area of the ejector pin's surface that is in contact with the melt. It displays the values as a function of time, per injection cycle.

The central unit consists of a switch, an industrial computer, and a tablet. The Cavity Eye software running on the tablet is responsible for displaying the data and managing the settings.

4. Technical data

MOLDi		
Weight of basic version	kg	7,8
Shipping size	mm	650x410x610
Operating temperature	°C	5-50
Power supply	V, Hz	90-264 V (AC) 47-63 Hz
Industrial protection rating	IEC 60529:1989 EN55022 TUV EN60950-1	IP54 EN61000-6-2 UL508
PC memory	GB	4
PC storage	GB	32 + 64
Max. consumption	W	120
Operating voltage	IEEE 802.3f	48 VDC

5. UTP cables

The measuring instruments, industrial computer, and tablet are connected via UTP cables to the switch. Alongside the data transmission, the power supply of the devices is achieved through this cable. The industrial switch provides power to the devices according to the IEEE802.3af standard.

6. Network option

The MOLDi system can be optionally expanded with the NET4 network system, enabling the storage of measurement data in a central location. Additionally, this allows for immediate

online availability of the data. The entire operation's machines and their associated manufacturing data are accessible and analyzable in real-time from a single location.

7. Types

Various configurations are available for the MOLDi system. The configuration depends on how many sensor signals we want to handle and which of the selectable options is chosen.

The MOLDi8 type can handle up to 8 sensors. Beyond 8 sensors, the MOLDi16 is used, and as the number of sensors increases, the MOLDi32 and MOLDi64 are available accordingly.

For 32 or more sensors, the SMP32 device can be used with the SMS32-A type socket with the corresponding counterpart placed on the mold. This type is capable of handling 32 sensors simultaneously. For more than 32 sensors, multiple units of this type can be used simultaneously according to the number of sensors.

A portable version of the MOLDi system is also available, known as the mobile instrument.

When ordering the MOLDi system, a larger-sized tablet is also available as an optional choice alongside the standard one. The standard-sized tablet is 10.1 inches, while the larger one is 15.6 inches.

UTP cables are available in a wide range of lengths to ensure that the system can be used regardless of machine size.

8. Contents of MOLDi system

- a) Hardware components
 - Industrial computer
 - Switch
 - Tablet
 - Smart Measuring Plug (SMP)
 - Smart Control Plug (SCP)
 - Smart Control Socket (SCS)
 - Smart Flow Plug (SFP, option)
- b) Software
 - MOLDi software
- c) Accessories
 - Industrial power supply
 - UTP cables
 - Fixing accessories

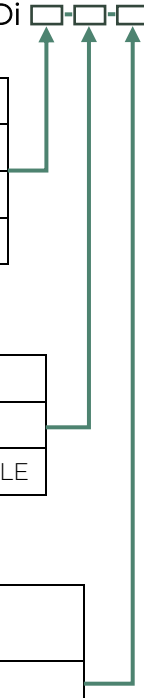
9. Item number information

MOLDi - -

Number of sensors	
up to 8 pcs sensors	8
up to 16 pcs sensors	16
up to 32 pcs sensors	32
up to 64 pcs sensors	64

Design	
10,1" tablet	S10
15,6" tablet	S15
Mobile instrument *	MOBILE

Measuring cable length	
Basic 10 m measuring cable	-
15 m measuring cable	X15
20 m measuring cable	X20



* In case of mobile instrument, the monitor size cannot be chosen.

Item number of basic version is MOLDi8-S15.

Item number example: MOLDi64-S15-X20

- System that can handle 64 sensors.
- With large-sized tablet
- With 20 m measuring cables