

CONCENTRATOR MMCD



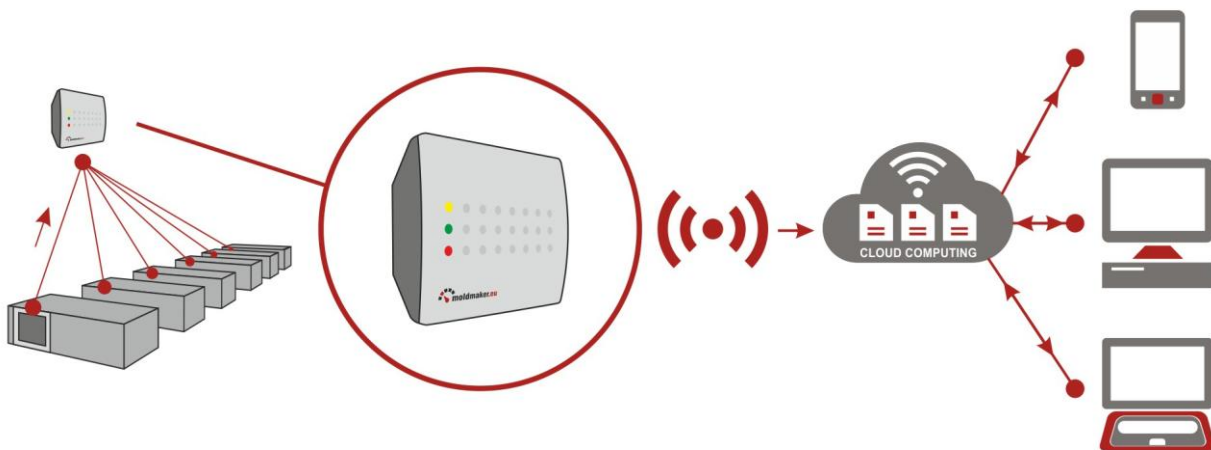
USER'S MANUAL

1. GENERAL

The concentrator is a maintenance-free device used to automatically collect and send data to the server from counters in its range (about 30m). MMCD concentrators are designed to work as a stand-alone unit or in a group of multiple concentrators when it is necessary to cover a larger area or several production halls.

2. MOUNTING

It is recommended to mount it on a ceiling or wall away from metal elements and devices that could interfere with its operation, such as WiFi routers, switched power supplies, and lamps. The installation place should be selected so that the concentrator has the best working conditions and covers the largest possible area. eg placing on a ceiling, pole or wall in an open space, possibly near the center of the hall, not less than 50cm from metal structural elements and in such a place that it is not covered by other obstacles. It is recommended to mount the concentrator on the boom at least 20 cm from the ground. In the case of large areas it is necessary to use more concentrators so as to cover the entire supervised area where counters are working.



Scanning using a concentrator - data flow diagram

3. TECHNICAL PARAMETERS

Power supply POE 48V 15W, Mode B (Pin 1,2,3,6 Data; Pin 4-5 V+ Pin 7-8 V-)

Range of supply voltages 45-57V

Works with AC 100-240V power supply (POE-48-24W) PoE 48V 0.5A supplied in a set.

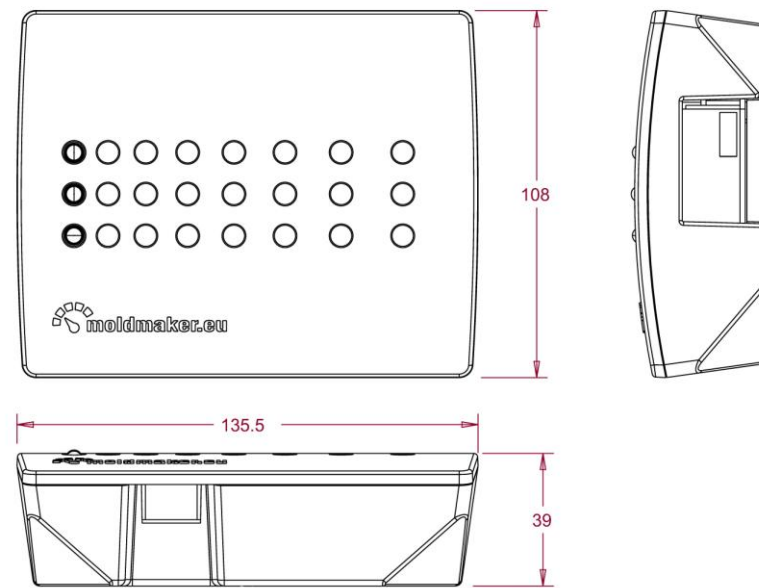
It can also work with switches that support POE power supply.

Condition: the load capacity of the switch output for a single socket must be greater than or equal to 24W.

Range of wireless scanning up to 30m.

The period of sending collected data from counters to the server: 5 minutes.

Dimensions: 108x135,5x39mm



Concentrator MMCD - dimensions

The concentrator is equipped with signaling LED-s that inform about the operating status of the device. After connecting the device to the power supply, it starts in about 1 minute. After this time, you can check the operating status in accordance with the table below.

LED colours	Continuous illumination	Blikning LED	The LED is off
Green LED (signaling the power state and work of the concentrator system)	The concentrator system is running	The correct POE power supply, the concentrator system is starting (up to 1 minute). When this situation lasts longer, it can mean: - no USB memory - or it is damaged - or damage to the concentrator.	No POE power supply, check if the power supply is working, check if the cable between the power supply and the concentrator is damaged.
Yellow LED (signaling connection to LAN and MoldMaker.eu service)	Active connection to Moldmaker.eu	No connection to MoldMaker.eu website, check the Internet connection.	No LAN connection, check the cable between the power supply and the router or there is no "key" file stored in the the USB memory
Blue LED (counter scanning signaling)	-	The correct operation of the wireless module Blinking not regular: scanning counters Blinking every 1 second: no counters in range	The wireless module is not active

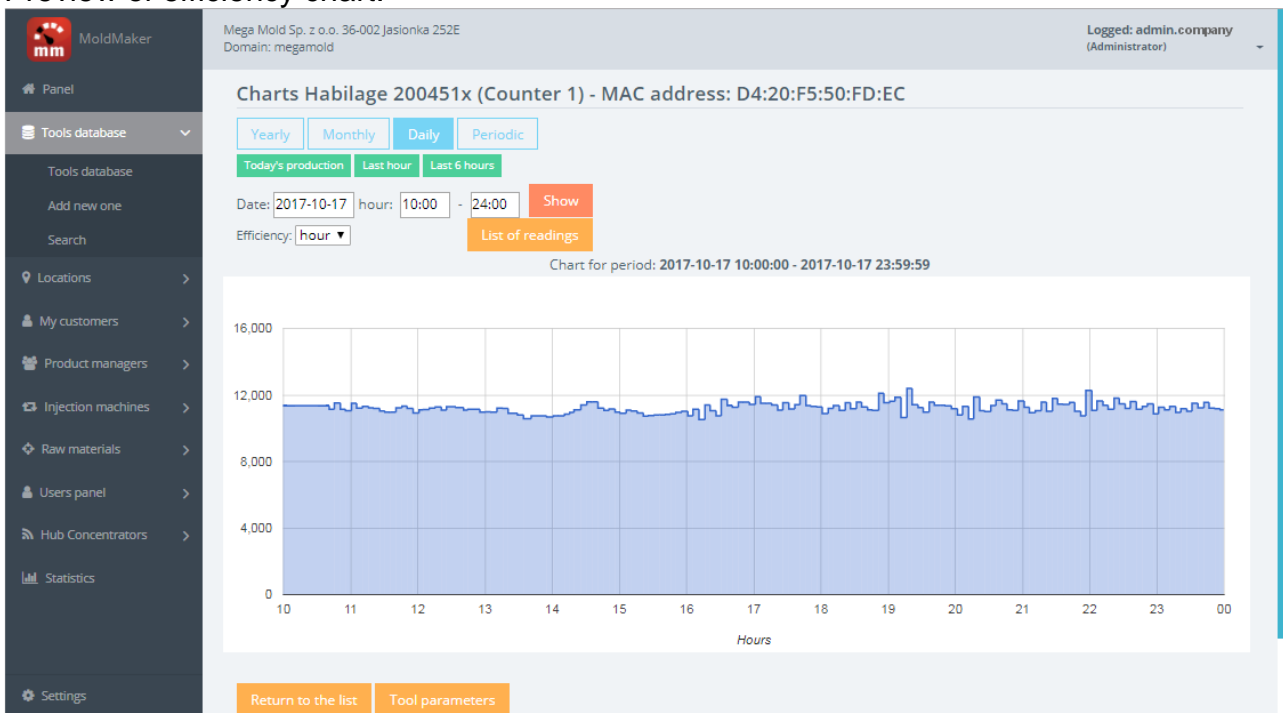
4. ADDITIONAL INFORMATIONS

For proper operation - it is required to connect the concentrator to the internet network using a LAN cable (the concentrator does not work with a Wi-Fi network). This is especially important during the first installation, when the clock is updated and the concentrator is activated. The concentrator works as a DHCP client and when it is started it waits for the IP address to be assigned by the local router. In the case of a temporary lack of internet connection, data from the counters scanning are collected in the concentrator's memory and will be sent to the server as soon as the internet connection is re-established.

Thanks to the use of the concentrator, the data from the counters are sent to the server regularly, at intervals of 5 minutes. This allows the current view of the counter status. On the moldmaker.eu website, the data can be viewed graphically by selecting annual, monthly, daily or periodic performance charts by clicking the graph icon in the form list.

Below you can see some examples of data obtained from the Mold Maker system.

Preview of efficiency chart:



Preview of the tool parameters:

- Tools database
- Add new one
- Search
- Locations >
- My customers >
- Product managers >
- Injection machines >
- Raw materials >
- Users panel >
- Hub Concentrators >
- Statistics
- Settings

Counter MAC address:

Tool:

Part name:

Location:

Customer:

Marked fields are required

Access sharing: for toolmaker (editing allowed) for subcontractor (reading only allowed)

Cancel Save

Count: 18 889 List of readings

Reading date: 2017-07-28 14:13 Charts

Disassembly sensor: mounted to the tool

Monitoring (disabled)

Disassembly history

Tool Spec.Card [TSC_13,Hanger A1,F500-3121](#)

Maintenance cards items count: 5

STATUS: not working
low battery

Actions:

- 2018-02-25 15:35, added periodic service remainder (20000/10000) [admin.megamold]
- 2018-02-25 15:34, access cancelled [admin.megamold]
- 2018-02-25 15:32, confirmed periodic term remainder (2018-04-25/every 2 months) [admin.megamold]
- 2018-02-25 00:00, SERVICE ! periodic (2018-02-25/every 2 months) [system]
- 2018-02-24 21:12, changed periodic term remainder (2018-02-25/every 2 months) [admin.megamold]
- 2018-01-03 17:05, confirmed periodic term remainder (2018-02-25/every 2 months) [admin.megamold]
- 2017-12-25 00:00, SERVICE ! periodic (2017-12-25/every 2 months)

Maintenance schedules +

Show "SERVICE" notification on display ?

The counter is programmed: -

Schedule 2

Next: 20000

every 10000

Harmonogram 1

Next: 25.04.2018 (in 59 days)

every 2 months

Preview of Service Card.

MoldMaker

- Panel
- Tools database >
- Tools database
- Add new one
- Search
- Locations >
- My customers >
- Product managers >
- Injection machines >
- Raw materials >
- Users panel >
- Hub Concentrators >
- Settings

Mega Mold Sp. z o.o. 36-002 Jasionka 252E
Domain: megamold

Logged: admin.company (Administrator)

Preview maintenance card for the tool: D9381-100-A-011 (Front socket)

Print
« Previous card
» Next card

Count: 7421

Status: - service required

Create date: 2017-11-16 10:08:14

Tool Spec.Card: TSC_24

Person: tomwayne.company

6. TECHNICAL REVIEW

Lp.	List of activities:
1.	Adjusting of small sliders, cleaning, electrical socket replace.

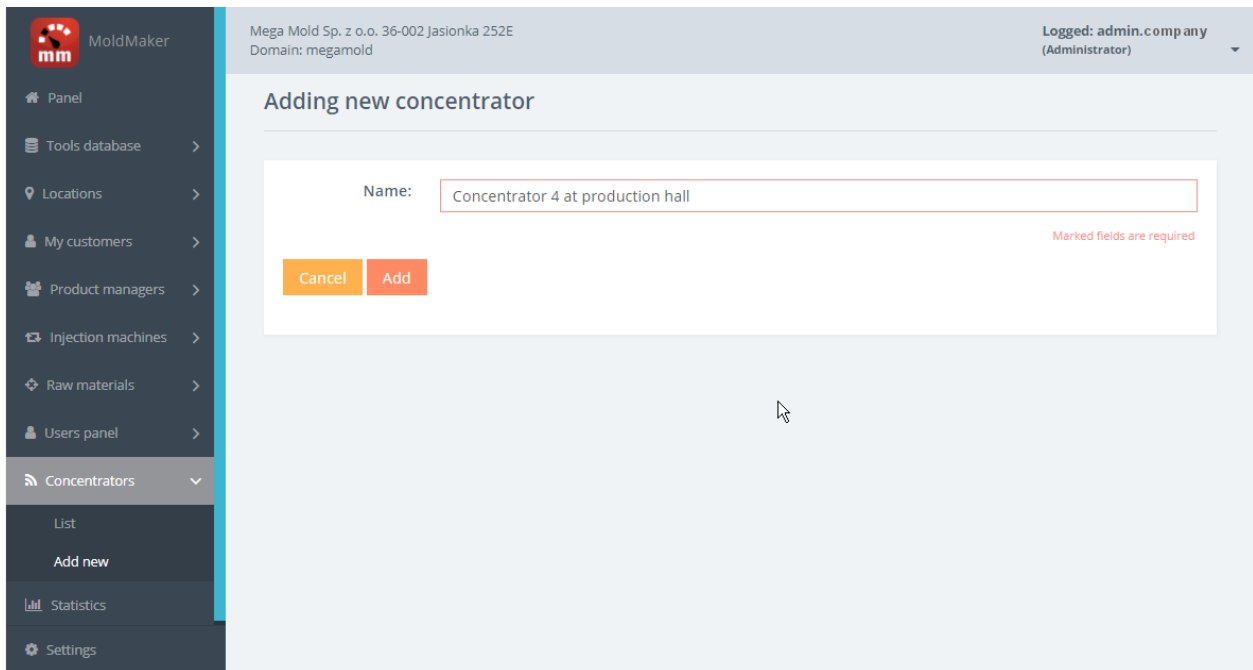
Return to the list

5. CONCENTRATOR ACTIVATION

To activate a new concentrator, log in to the MoldMaker system on the page:

<http://moldmaker.eu/panel/>

Remember that in order to register a new concentrator, you must be logged in to the system under an account with administrator privileges. Use left menu, select "Concentrators" and then "Add new".



Mega Mold Sp. z o.o. 36-002 Jasionka 252E
Domain: megamold

Logged: admin.company (Administrator)

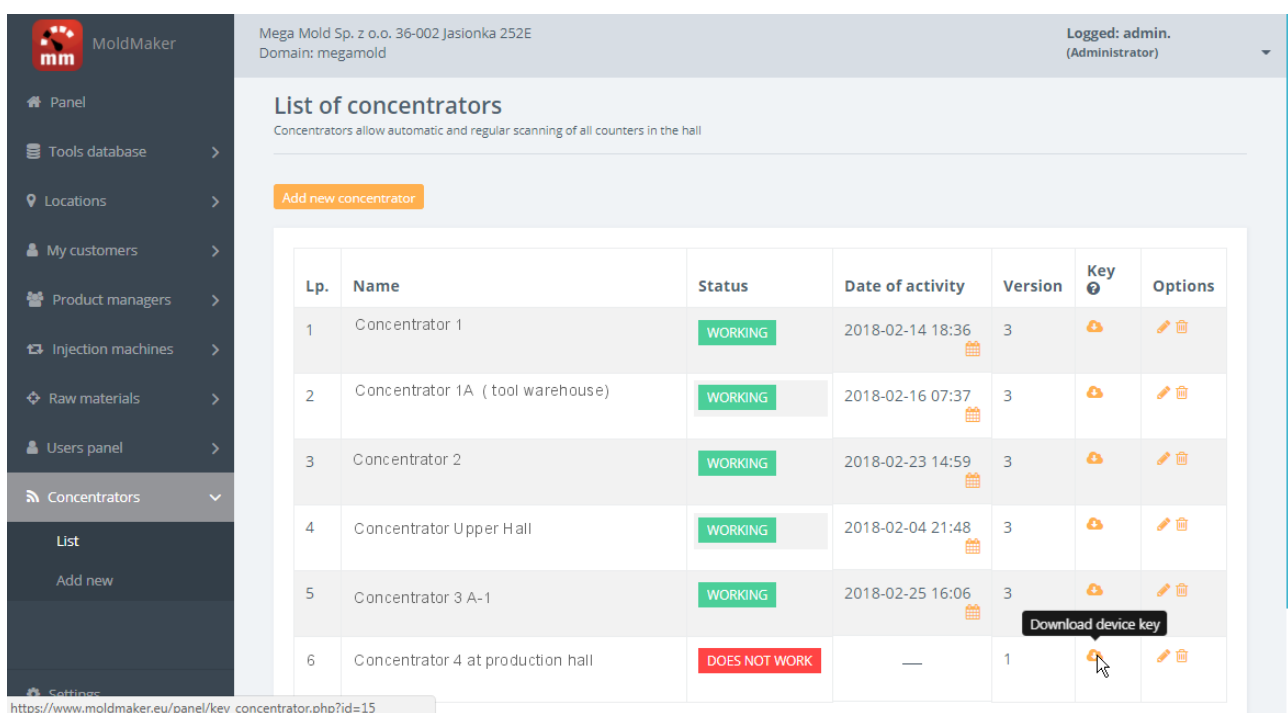
Adding new concentrator

Name:

Cancel Add

Marked fields are required

Enter the name of the concentrator and confirm with "Add". The concentrator will appear on the list of concentrators initially with the status "DOES NOT WORK".



Mega Mold Sp. z o.o. 36-002 Jasionka 252E
Domain: megamold

Logged: admin. (Administrator)

List of concentrators

Concentrators allow automatic and regular scanning of all counters in the hall

Add new concentrator

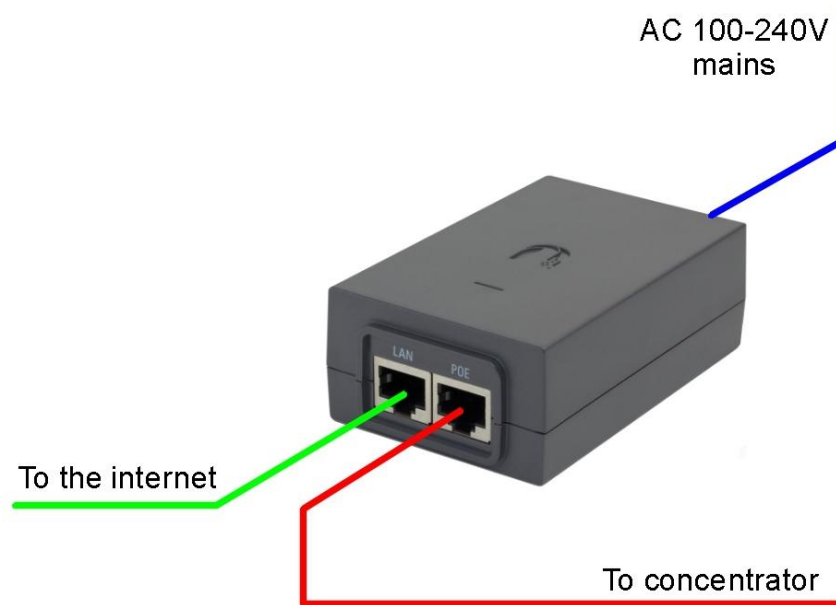
Lp.	Name	Status	Date of activity	Version	Key	Options
1	Concentrator 1	WORKING	2018-02-14 18:36	3		
2	Concentrator 1A (tool warehouse)	WORKING	2018-02-16 07:37	3		
3	Concentrator 2	WORKING	2018-02-23 14:59	3		
4	Concentrator Upper Hall	WORKING	2018-02-04 21:48	3		
5	Concentrator 3 A-1	WORKING	2018-02-25 16:06	3		
6	Concentrator 4 at production hall	DOES NOT WORK	—	1		

Download device key

https://www.moldmaker.eu/panel/key_concentrator.php?id=15

Download the device key file and copy it to a USB stick and place in the concentrator's USB port. Connect power to the by plugging the cable into the LAN POE socket. After a few minutes refresh the page, the status "WORKING" should appear on the web panel.

6. CONCENTRATOR POWER SUPPLY



The way of connecting the power supply to the concentrator.

The order of connecting the power supply wires:

1. Connect the POE cable to concentrator socket (max length approx. 100 m)
2. Connect the LAN cable to the router or switch
3. Connect the power cable to the AC 100-240V mains

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