

# secure.

**secure.** What does this word mean to you and your organization?

Security is not a question of size – all companies are exposed to wide-ranging forms of risk. Effective leaders must protect their organization from threats originating both externally and internally. In order to fully mitigate these risks, it is essential that you take a complete and comprehensive approach to your facility operations and network security. While many companies take dramatic steps to prevent cyber-attacks and physical intrusions, few have complete oversight to the physical access of their network and critical assets.

Given all of the dangers present in today's business world, do you feel **secure**?

Yours, Karl-Heinz Overhamm,  
Managing Director



## MLR

Mechatronic Locks for Racks

## MLE

Mechatronic Locks for Enclosures

## MLI

Mechatronic Locks for Industrial Applications

## MLU

Mechatronic Locks for Universal Applications

## MLM

Mechatronic Locks Management

## MLA

Mechatronic Locks Accessoires

Part numbers

Secure

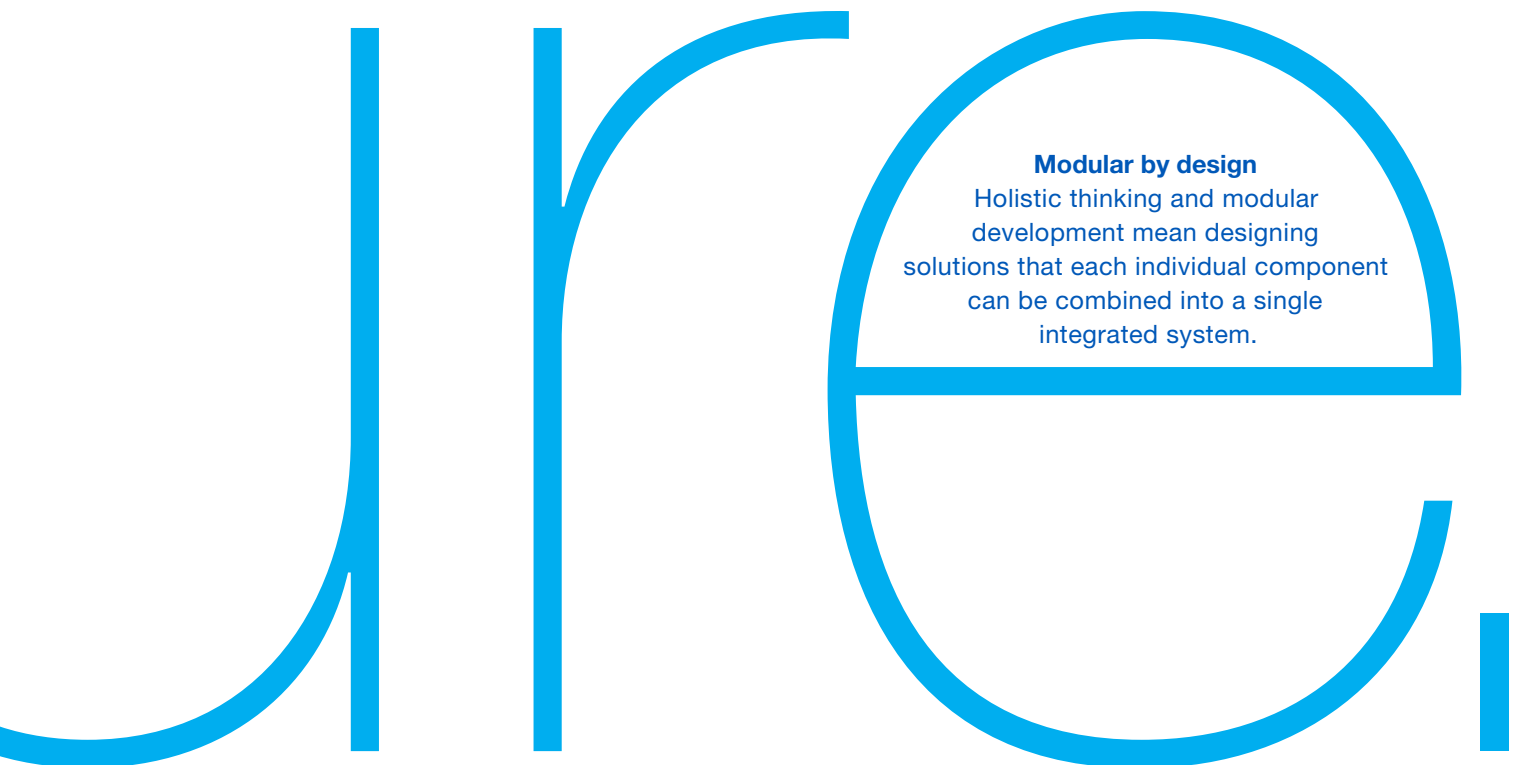
Individualized access control  
along with real-time monitoring  
and documentation are  
the fundamental tools for  
**organized security.**

### **Controlled access**

Organizing, controlling, and monitoring access are essential physical security measures for enclosures. These processes provide the system administrator with confidence and peace of mind when making decisions.

### **Modular by design**

Holistic thinking and modular development mean designing solutions that each individual component can be combined into a single integrated system.



**E.LINE**

by DIRAK

Mechatronic Locks  
for Racks **MLR**

Maintain  
an overview.





The mechatronic  
access control solution  
for data center racks.

- Ideal for (de)centralized data center environments
- Integrates into existing management system
- Emergency power interface for battery pack
- Gapless audit trail
- One and two factor authentication



	MLR5000 KP	MLR3000 KP	MLR5000	MLR3000	MLR1000	
Interface	Ethernet	RS485	Ethernet	RS485	–	
Storage space transponder		1.000		2.000	–	
Storage space PIN		1.000		–	–	
Stand-alone		possible		possible	–	
LED handle status		■		■	■	
Keypad with LED keypad status		–		–	–	
LED temperature status		■		■	–	
LED sabotage alarm/ready for opening		■		■	–	
Illuminated info field		–		Color configurable	Color configurable	
Door contact input		■		■	–	
Storage for 500 events and 30 time profiles		■		■	–	
Integrated real-time clock		■		■	–	
Power supply ±10 %(DC)/standby current (DC)/max. current consumption (DC)		12 V/45 mA/440 mA		12 V/40 mA/440 mA	12 V/40 mA/410 mA	
Reader 125 kHz		■		■	–	
Reader 13,56 MHz		■		■	–	
Conditional Relay		■		■	–	
Relay output		■		■	–	
Power over Ethernet capable	■	–	■	–	–	

Unauthorized Access  
or  
"Blocking Period"

Alarm

Temperature alarm

Handle  
open

Door  
open



Configurable LED

Ready for operation

Temperature okay

Access  
Authorized

"Green  
Period"

**E.LINE**  
by DIRAK

Mechatronic Locks  
for Enclosures **MLE**

Maintain security  
despite vandalism  
and storms.





The secure mechatronic  
access control solution  
for outdoor enclosures.

- Gapless audit trail
- For outdoor applications
- Vandal-proof and weather resistant
- Integrates into existing management systems



MLE5000 RFID ANTENNA
Interface Ethernet Storage
space 2000 Transponder Integrated (125 kHz), 13,56 MHz on request / with Key Pad on request, 1 Master real-time clock
Storage space for 500 events + 30 time profiles
Stand-alone possible
Relay output and door contact input
Standby current (DC) 40 mA
Max. current consumption (DC) RJ 12/Lock: 1,4 A
A Max. current consumption (DC): 3 A (terminal 10–11) when engaging the coupling
LED for status display (can be optionally switched off)
Material GDZn powder-coated and plastic
watertight and dust-tight (IP 65)
Nominal input voltage (DC) 12/24/48 V ±10 % 120 mA, depending on lock
Power over Ethernet capable



	MLE1102	MLE2100	MLE1200	MLE2200	
Opening	"Or"	"And"	"Or"	"And"	
LED handle status	on request	■	—	—	
Power supply (DC)	12 V/24 V/48 V ±10 % 250 mA/140 mA/100 mA	24 V ±10 % / 120 mA	48 V ±10 % / 120 mA	24 V ±10 % / 120 mA	
Status request	Proximity switch (potential-free)	Inductive sensor	Proximity switch (potential-free)	Inductive sensor	
for electronic opening power supply	established	interrupted	established	interrupted	
watertight and dust-tight (IP 65)	■	■	■	■	
installable cylinder	1	1	2		
Color*	light grey/black, powder-coated, antigrafitti	black, powder-coated	black, powder-coated		
Material	zinc diecast	zinc diecast	zinc diecast		
Vandalism-proof	■	■	■		

\* other colors on request

Protect and regulate  
working processes.



Optimum protection  
through links with the control  
of systems and machines.

- Gapless audit trail
- LED status display on the handle
- Integrates into existing management systems
- Stand-alone or integration in the machine control
- „Or“-Locking



MLI1101
Black plastic (PA6)
single-color LED Ready for opening
Power supply 24 V ±10 % (DC), 220 mA
Status request: Proximity switch (potential-free)
Plate cylinder
“Or” closing
for electronic opening power supply established

**E.LINE**  
by DIRAK

Mechatronic Locks  
for Universal Applications **MLU**

Invisible,  
secure  
locking





Invisible, secure locking  
for universal applications

- Gapless audit trail
- Versatile solution
- High pull-off force
- Can be combined with mechanical lock solutions
- Integrates into any existing management systems



	MLU5000	MLU3000
Interface	Ethernet	RS485
Ethernet Material		Plastic
Color		black
Power supply (DC)	12/24/48V ±10% (depending on lock)	
Storage space for transponder		2.000
Stand-alone		possible
LED lock status		■
LED sabotage alarm/ready for opening		■
Illuminated info field		■
Reader 125 kHz		■
Reader 13,56 MHz		on request
Relay output		■
Door contact input		■
Integrated real-time clock		■
Storage space for 500 events + 30 time profiles		■
Standby current (DC)		40mA
Max. current consumption (DC), RJ 12/Lock		1,5A
Max. current consumption (DC), with closing		3A (terminal 10–11)
Power over Ethernet capable	■	—

MLU1000
Proximity switch status
For electronic opening voltage supply interrupted or connected
Material: GDZn
Color: mat chrome-plated Power
Supply: 12/24/48 + 10% (DC) with 140/90/50 mA

**E.LINE**  
by DIRAK

Maintain control,  
anytime,  
anywhere

Mechatronic Locks  
Management **MLM**





Complete control and monitoring  
with E-LINE by DIRAK locking solutions.

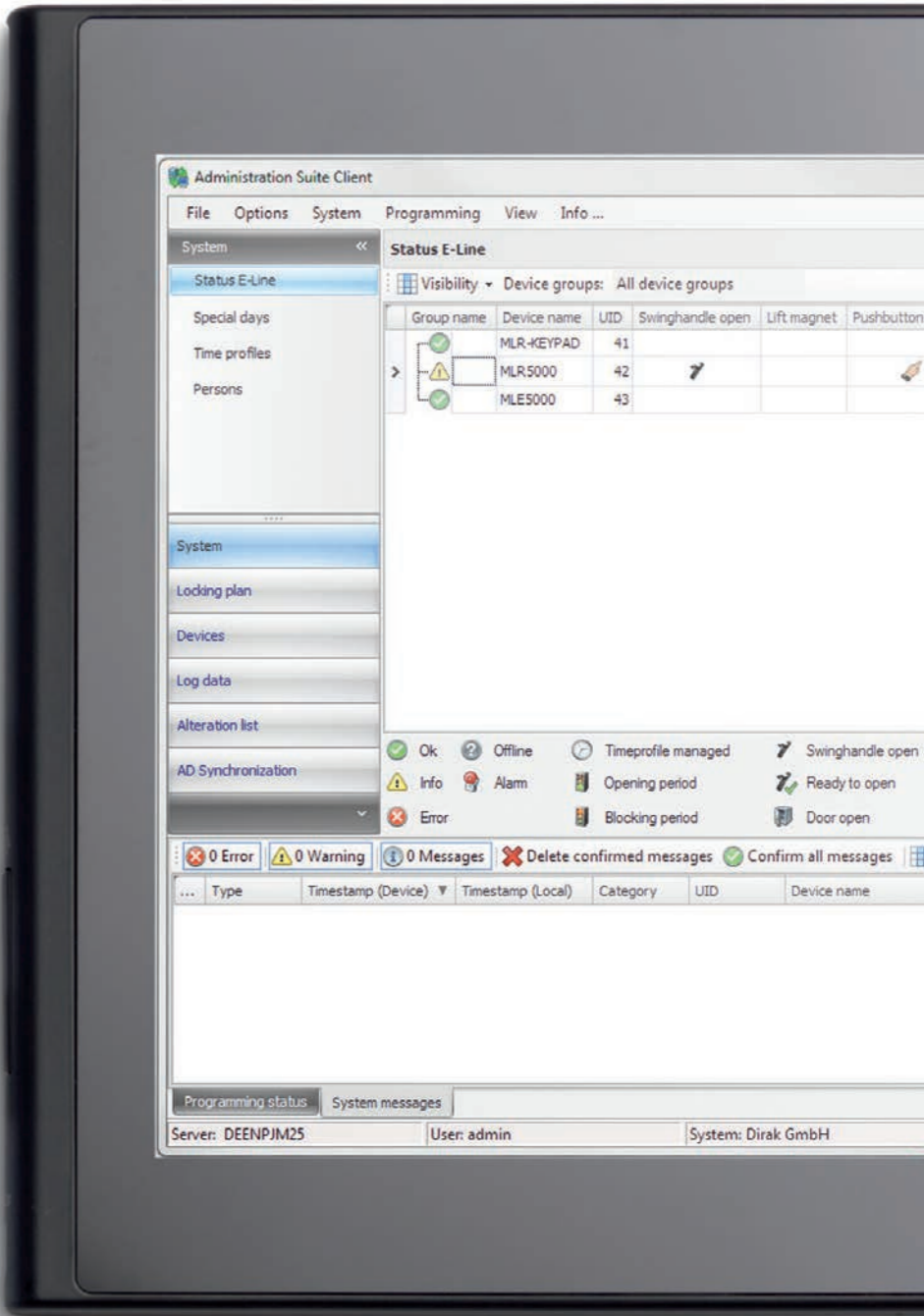
With the MLM Administration Suite you control the access to enclosures  
anytime, anywhere. The software provides a gapless audit trail of all events,  
giving you a complete overview and a good sense of security.

- Intuitive user guide
- Gapless audit trail
- (De)centralized management for authorization

secure. 24 365



MLM ADMINISTRATION SUITE
Gapless audit trail
Server-client application
Display of the handle status in real-time
Automated task management
Release time/lock time (permanently ready for opening) No accidental re-patching on the server possible while data backups are running
Comprehensive alarm systems
Active directory integration
Interfaces for 3rd party systems
Four-eyes principle for higher security levels
Assignment of rights to different users
Planned access
Super user card (always authorized)
Colored configuration of the information field simplifies rack groupings
Management of device groups for better overview
Temperature monitoring
encrypted data communication between hardware, server and client







BATTERY PACK

In the event of a power outage, you can carry out a secure emergency opening procedure on the MLR/MLU3000 and MLR/MLU5000 thanks to the battery pack, without the logging stopping and leading to security gaps. The battery pack is coupled with the interface of the MLR handle or MLU antennae unit.



DESKTOP READER

The desktop reader allows you to read the transponder codes from the access media. The desktop reader is located in a handy housing and comes with a USB 2.0 cable.



DOOR CONTACT

If the door contact is connected to the readers of the MLR3000 and MLR5000 systems, our MLM Suite will also show you the current status of the particular rack door.



POWER SUPPLY UNITS  
(12/24V DC)

Country-specific versions of the power-supply units required for E-LINE by DIRAK systems are available in the versions EU, UK and USA.



POWER SUPPLY  
C13/C14

Power cables can be ordered optionally.



Mechatronic access controls  
for your industrial enclosure

SEE

# UNE

Questions regarding physical installation?  
For more information:  
[elinebydirak.com/physical-installation](http://elinebydirak.com/physical-installation)

## MLR

<b>MLR1000</b>	Offset	610-9507.07-07101
	Rod latch	610-9501.07-07101
	Multi-point cam	610-9539.07-07101
	Rod latch (Rittal)	610-9545.07-07101
<b>MLR1000 (24 V)</b>	Offset	610-9543.00-00000
	Rod latch	610-9544.00-00000
	Multi-point cam	610-9542.00-00000
	Rod latch (Rittal)	610-9546.07-07101
<b>MLR2000 (125 kHz)</b>	Offset	610-9807.00-00125
	Rod latch	610-9801.00-00125
	Multi-point cam	610-9839.00-00125
	Rod latch (Rittal)	610-9845.00-00125
<b>MLR2000 (13,56 MHz)</b>	Offset	610-9807.00-01356
	Rod latch	610-9801.00-01356
	Multi-point cam	610-9839.00-01356
	Rod latch (Rittal)	610-9845.00-01356
<b>MLR3000 (125 kHz)</b>	Offset	610-9707.00-00000
	Rod latch	610-9701.00-00000
	Multi-point cam	610-9739.00-00000
	Rod latch (Rittal)	610-9745.00-00000
<b>MLR3000 (13,65 MHz)</b>	Offset	610-9707.00-11356
	Rod latch	610-9701.00-11356
	Multi-point cam	610-9739.00-11356
	Rod latch (Rittal)	610-9745.00-11356
<b>MLR3000 KP (125 kHz)</b>	Offset	610-9307.00-00000
	Rod latch	610-9301.00-00000
	Multi-point cam	610-9339.00-00000
<b>MLR3000 KP (13,65 MHz)</b>	Offset	610-9307.00-00001
	Rod latch	610-9301.00-00001
	Multi-point cam	610-9339.00-00001
<b>MLR5000 (125 kHz)</b>	Offset	610-9607.00-00000
	Rod latch	610-9601.00-00000
	Multi-point cam	610-9639.00-00000
	Rod latch (Rittal)	610-9645.00-00000
<b>MLR5000 (13,65 MHz)</b>	Offset	610-9607.00-11356
	Rod latch	610-9601.00-11356
	Multi-point cam	610-9639.00-11356
	Rod latch (Rittal)	610-9645.00-11356
<b>MLR5000 KP (125 kHz)</b>	Offset	610-9407.00-00000
	Rod latch	610-9401.00-00000
	Multi-point cam	610-9439.00-00000
<b>MLR5000 KP (13,65 MHz)</b>	Offset	610-9407.00-00001
	Rod latch	610-9401.00-00001
	Multi-point cam	610-9439.00-00001

## MLE

<b>MLE5000 RFID</b>	Antenna + Reader without handle	602-8003.00-05000
<b>MLE1102 (12 V)</b>	For outdoor area, black	602-8012.00-00012
<b>MLE1102 (24 V)</b>	For outdoor area, black	602-8012.00-00024
<b>MLE1102 (48 V)</b>	For outdoor area, black	602-8012.00-00048
<b>MLE1102 (12 V)</b>	For outdoor area, light grey	602-8007.00-00012
<b>MLE1102 (24 V)</b>	For outdoor area, light grey	602-8007.00-00024
<b>MLE1102 (48 V)</b>	For outdoor area, light grey	602-8001.00-00000
<b>MLE2100</b>	Outside, single, OR	600-9001.00-00000
<b>MLE1200</b>	Outside, double, OR	600-9004.00-00000
<b>MLE2200</b>	Outside, double, AND	600-9002.00-00000

## MLI

<b>MLI1101 (24 V)</b>	Offset	610-9010.00-00000
	Rod latch	610-9007.00-00000
	Multi-point cam	610-9009.00-00000

## MLU

<b>MLU1000 (12 V)</b>	current-free closed	600-9723.00-00000
<b>MLU1000 (24 V)</b>	current-free closed	600-9724.00-00000
<b>MLU1000 (12 V)</b>	current-free closed	600-9725.00-00000
<b>MLU1000 (48 V)</b>		600-9721.00-00000
<b>MLU1000 (24 V)</b>		600-9708.00-00000
<b>MLU1000 (48 V)</b>		600-9722.00-00000
<b>MLU3000 Kit (125 kHz)</b>	Complete (incl. MLU1000)	610-9750.00-00000
<b>MLU3000 Kit (13,56 MHz)</b>	Complete (incl. MLU1000)	610-9750.00-01356
<b>MLU3000 (125 kHz)</b>	Antenna + reader (without MLU1000)	610-9750.01-00125
<b>MLU3000 (13,56 MHz)</b>	Antenna + reader (without MLU1000)	610-9750.01-01356
<b>MLU5000 Kit (125 kHz)</b>	Complete (incl. MLU1000)	610-9650.00-00000
<b>MLU5000 Kit (13,56 MHz)</b>	Complete (incl. MLU1000)	610-9650.00-01356
<b>MLU5000 (125 kHz)</b>	Antenna + reader (without MLU1000)	610-9650.01-00125
<b>MLU5000 (13,56 MHz)</b>	Antenna + reader (without MLU1000)	610-9650.01-01356

## MLM

<b>MLM Administration Suite Software</b>	608-6801.00-00000
--	-------------------

## MLA

<b>MLA Gateway</b>	Without power supply	608-9742.00-00000
<b>MLA E-Desktop-Reader (125 kHz, 13,56 MHz)</b>		610-9842.00-00000
<b>MLA HID Card 26 bit “iso Prox II”</b>	White, blank	607-5926.00-00026
	With E-LINE logo	607-5926.00-00001
	Customer logo	On request
<b>MLA Micro Prox 26 bit</b>	Self-adhesive	607-5929.00-00000
<b>MLA Netzwerkkabel CN 2001</b>	3 m	607-5907.00-00000
<b>MLA Y-cable / T-adapter</b>	10 cm	607-5972.00-00000
<b>MLA power supply (12 V)</b>	incl. adapter (EU/USA/UK)	610-5903.00-02412
<b>MLA E-LINE door contact</b>	4 m	607-5959.00-00400
<b>MLA E-LINE control cable</b>	3,5 m	607-5947.00-00350
<b>MLA configuration cable</b>	Serial	607-5949.00-00000
<b>MLA Battery Pack (12 V)</b>	For MLR handle (EU)	610-9901.00-00001
	For MLR handle (US)	610-9903.00-00001
	For MLR handle (UK)	610-9902.00-00001
<b>MLA power supply (24 V, 1.0 A)</b>	EU, US, UK	610-5905.00-00024
<b>MLA Mifare Desfire ev1 4k (13,56 MHz)</b>	White, blank	610-5926.00-01356
	With E-LINE logo	610-5926.00-00001
	Customer logo	On request
<b>MLA Mifare Tag 1435 (13,56 MHz)</b>	Self-adhesive	610-5927.00-01356
<b>MLA C13 power supply</b>	Without power unit, 12V	610-5901.00-00C13
	Without power unit, 24V, 1A	610-5906.00-00C13
<b>MLA C13 network cable</b>	Without power supply	610-5902.00-00000
<b>MLA General Card (125 kHz)</b>		608-8505.00-00000
<b>MLA Group Card (125 kHz)</b>		608-8504.00-00000
<b>MLA Blocking Card (125 kHz)</b>		608-8503.00-00000
<b>MLA Unblocking Card (125 kHz)</b>		608-8502.00-00000
<b>MLA General Card (13,56 MHz)</b>		608-8505.00-01356
<b>MLA Group Card (13,56 MHz)</b>		608-8504.00-01356
<b>MLA Blocking Card (13,56 MHz)</b>		608-8503.00-01356
<b>MLA Unblocking Card (13,56 MHz)</b>		608-8502.00-01356
<b>MLA torque wrench</b>	Wera 0,3 –1,2 NM Kit	610-1015.00-00000
<b>MLA Sensor Box</b>		610-9006.00-00000

secure. [eline@dirak.de](mailto:eline@dirak.de)  
[elinebydirak.com](http://elinebydirak.com)

◀ Product numbers

U n r e

E-LINE by DIRAK –  
A brand of  
DIRAK GmbH  
Königsfelder Straße 1  
D-58256 Ennepetal  
+49 (0) 2333 837-0  
[eline@dirak.de](mailto:eline@dirak.de)  
[elinebydirak.com](http://elinebydirak.com)