# IIOT GATEWAY

DIAP integrates both hardware and software

An all-inclusive solution

In contrast to many similar products on the market, DIAP is an all-inclusive solution integrating both hardware and software.

The DIAP IIoT gateway collects all types of data and is fully compatible with any PLC, sensor or industrial robot.

DIAP is the obvious choice if you wish to digitalize your production and work towards Industry 4.0. And it does not require you to make large investments or change your way of working completely.
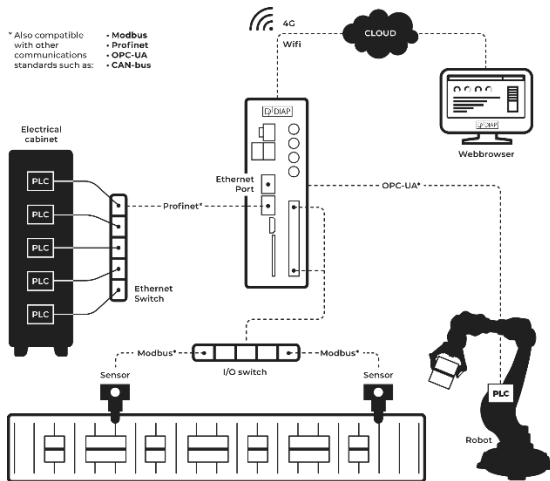
How does it work?

The DIAP gateway is easily installed in the electrical cabinet, and it is ready to collect data as soon as it is connected.

All you need to do, is to decide what type of data you wish to collect and from where you want to collect it – PLCs, sensors or robots.

DIAP communicates with your production equipment via I/O connectivity or Ethernet, and it is compatible with all common communication standards such as Profinet, OPC-UA, Modbus, CAN-bus etc.

DIAP Partner contact:
Ib Laugesen
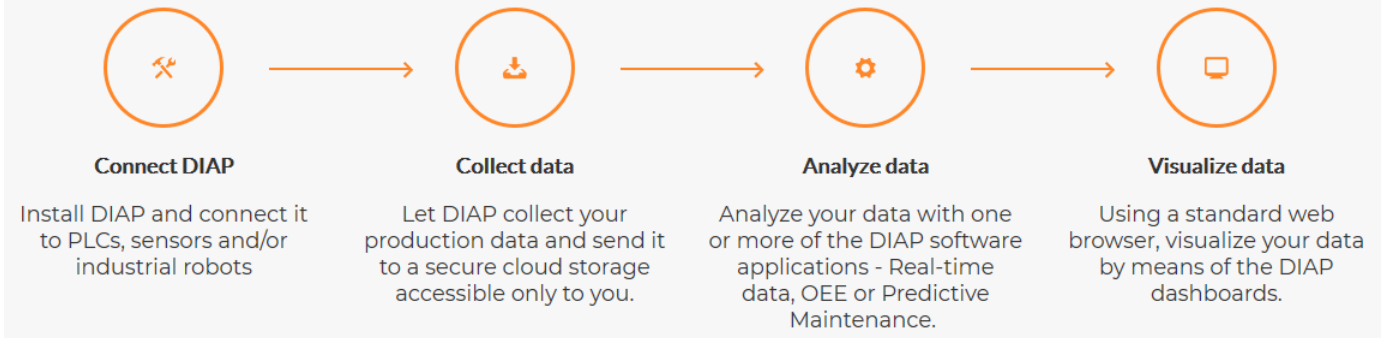Direktør og Projektchef
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How to get started?

Connect DIAP
Install DIAP and connect it to PLCs, sensors and/or industrial robots

Collect data
Let DIAP collect your production data and send it to a secure cloud storage accessible only to you.

Analyze data
Analyze your data with one or more of the DIAP software applications - Real-time data, OEE or Predictive Maintenance.

Visualize data
Using a standard web browser, visualize your data by means of the DIAP dashboards.

Secure cloud storage

Your collected data is securely transferred from the DIAP gateway to a cloud database for safe storage. DIAP comes with a Microsoft Azure solution that includes unparalleled security intelligence. In this way, we guarantee maximum protection of your data.
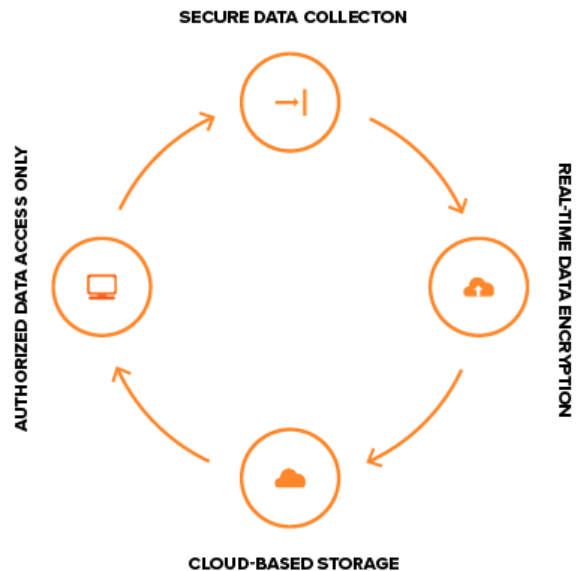
Each DIAP user has a unique password. Access to the DIAP software is managed by one or more administrators selected by you.

We perform secure, regular updates of the software suite to protect against the latest threats.

Your collected data is transported securely from the DIAP gateway to a cloud database for safe storage. DIAP uses Microsoft Azure to ensure maximum protection of your data. All DIAP users are provided with a unique password.

We perform secure, regular updates of the software suite to protect against the latest threats.

SECURE DATA COLLECTON

AUTHORIZED DATA ACCESS ONLY

REAL-TIME DATA ENCRYPTION

CLOUD-BASED STORAGE

Local protection
- The latest Linux security features incl. extended DAC
- A key management subsystem for managing cryptographic keys within the kernel

Features
- Complete infrastructure: SQL database, website and IoT hub

Communication
- Highest security standards
- Secure connection: TLS 1.2 and RSA with HMAC-SHA256 symmetric keys and signature
- VPN or cloud access

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IT & DATA SECURITY

Your data contains information that is sensitive to your business. You have full authority over all data generated by DIAP at your production site. Your data is yours and will stay yours.

End-to-end data security
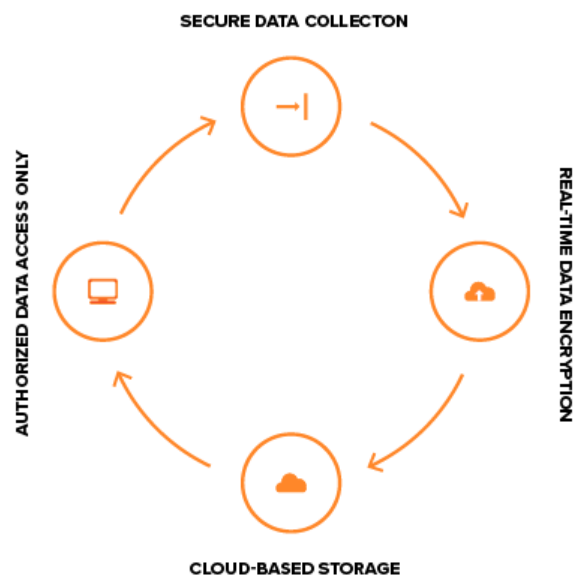
Multi-level information security

DIAP is equipped with multi-level information security to ensure that the collected data is protected in the best possible way.

Highest security standards available

We have secured every element of the DIAP data flow with the highest security standards available for an end-to-end security.

Restricted user privileges

The system has restricted user privileges. Users are grouped as full access administrators or restricted access operators. Each user has a unique password with two-factor authentication.

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SPECIFICATIONS

POWER SUPPLY

Input voltage	24 VDC (18-30 VDC)
Power consumption	20 Watts max
Consumption (rated)	600 mA at 24 VDC
Consumption, max	850 mA at 24 VDC

COMPUTING AND STORAGE

Processor	i.MX6 Quad 800 mHz
System memory	2 GB DDR3 RAM
Internal hard disk	120 GB SSD
uSD	1 slot

ETHERNET

No. of ports	1 (2)
Transmission rate	10/100/1000 Mbit/s

OTHER BUSSES

CAN	2 ports
RS485	1 port
USB	2 ports (standard 2.0)
I2C	1 port

WI-FI

Certified	FCC, ETSI, TELEC
IEE standard	802.11a/802.11b/802.11g/802.11n
Operation frequency	2.4 GHz, 5 GHz
External antenna	Yes

BLUETOOTH

Compliance	Bluetooth 4.1
Bluetooth LE support	Yes
External antenna	Yes

PLC SCAN RATE

Scan rate	Every 100 ms

DIGITAL INPUTS & OUTPUTS

No. of inputs	8
Input voltage, rated	24 VDC
Input voltage "0"	<7.8 VDC
Input voltage "1"	>12 VDC
No. of outputs	2
Output voltage "1"	24 VDC
Output voltage "0"	0 VDC
Current limit	600 mA

ANALOG INPUTS

No. of inputs	4
Input range	4-20 mA (0-20 mA)
Input resistance	250 ohm
Resolution	12 bit
Sampling time	1 ms

ENVIRONMENTAL

Operating temp.	0 to +60 degrees Celcius
Storage temp.	-40 to +80 degrees Celcius
Relative humidity	95% non-condensing
Altitude	Up to 2000 m
Protection marking	IP20

CELLULAR DATA

4G	800/900/1800/210/2600 MHz
3G	900/2100 MHz
2G	900/1800 MHz

GSM module according to European standards. Module can be changed, if required.

DIMENSIONS

Height	185 mm
Width	53 mm
Depth	128 mm
Standard weight	700 g

DIAP is a product of Eltronic A/S - Data Intelligence and is sold worldwide through partners.

Fighting risks proactively

Industry 4.0 paves the way for interconnectedness at a previously unseen level. This lets you gain insight into your manufacturing processes, but it also makes the risk of cyber-attacks more imminent than ever.
We believe in a proactive approach to fighting the latest security threats. You will frequently receive system updates to ensure that your DIAP infrastructure meets the highest security requirements.

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