

# The future of service in machine manufacturing



www.ixon.cloud



### Introduction

Optimize production, embrace sustainability

Faster production, that's what it's all about. With less waste of energy and raw materials. Your customer expects the ultimate machine from you. However, the limit has been reached. Improving the mechanics and applying better electronics or smarter software is no longer enough.

To take production to the next level, you have to be closer to the machine, so you can act faster and better support your customer during production. Your service approach needs to change. That is what we are going to do to future-proof your organization and realize a more sustainable world. That's what we are going to do together, for a more sustainable world.

### Industrial IoT Solutions for Machine Builders

IXON offers a distinctive IoT solution tailored specifically for modern machine builders:

- From Machine to Cloud: Experience the seamless integration of hardware and software from IXON, ensuring a reliable, user-friendly, and secure solution.
- Integrated Remote Access: Recouped immediately with the first service intervention and an additional selling point that allows you to offer your customer direct and free access to their machine.
- Full-fledged IIoT: Offer your customers a total IoT experience today, complete with a customer portal.
- Open and Expandable: No limitations with our open and expandable platform, so IXON never hinders your success.

Check our catalog and discover how IXON can transform your service organisation. Happy browsing!





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### **Remote Access**

Access anywhere, anytime

Want to reach your machines that are far away? With IXON Cloud, you can connect to your machines from anywhere, anytime. This means fixing issues, changing settings, and providing support can be done without sending someone over.

IXON Cloud provides a secure way to connect remotely. Strict security ensures that only the right people get access. It's easy for anyone to use from a laptop, tablet or smartphone.

#### **Key Features**

- VPN servers across 17 locations, a low-latency connection by automatically using the nearest server.
- LAN Access Management to allow remote users to access only one specific device (e.g., robot).
- Remote access to USB devices through USB over IP.
- VPN client installs automatically from IXON Cloud, works on Windows, Mac, Linux, iOS, and Android.
- ✓ VPN Stealth Mode<sup>™</sup> for connections in countries with internet censorship.
- M2M Cloud Cluster For always-on access to machines from automated systems (e.g., management systems or other machines).
- Configurable VPN over TCP or UDP choose between reliability and efficiency for communication.
- Supports discovery of PLCs, drives, and other equipment with Layer 2 broadcast.

### **One-Click Touch Panel Access**

Anyone can easily access the touch panel remotely through WebAccess, even if you're not a tech person. One click in IXON Cloud or the IXON app, and you are on your touch panel. WebAccess is available for touchpanels with VNC or web server (WebVNC and WebHTTP).







# Fleet Management

Keep control over your machines worldwide

As your fleet of connected machines grows, it's a must to keep everything organized. Your job is to ensure a secure environment where users can access the right machines. It's essential that each machine has the right settings and that the Edge Gateways always have the latest firmware.

IXON Cloud offers a simple way to see all your machines across the world. Use filters or zoom in on the map to find them.

IXON's Edge Gateways work perfectly with IXON Cloud, making sure everything is dependable and easy.

### **Key Features**

- Easily add details to machines like project numbers or locations.
- Settings from Edge Gateways are synced and saved in IXON Cloud.
- Set up your machines quickly using easy templates.
- ✓ See the current status of all your machines in one go.
- ✓ Use the map view to quickly find and choose machines.

With IXON, managing your fleet is simple and efficient.







Status 1	Name	Customer	Last online	Actions
	Flow 4	K&S	Now	Connect 👻
٠	Flow 7	VertiFlow	Now	Connect 👻
٠	Flow 10	Pack&Go	Now	Connect 👻
•	FlowPacker	PackXperts	Now	Connect 👻
٠	OpticalPack	Boxpackers	Now	Connect 👻
٠	OpticalPack	Coolblue	Now	Connect 👻
٠	OpticalPackPro	VertiFlow	Now	Connect 👻
•	Xpacker 16	K&S	Now	Connect 👻



# **User Management**

Providing targeted access

Today, many different people need access to your IoT portal, each with their own role. Think of your own service teams, sales people and data analysts. But also your customers, with their production leaders, operators and managers.

Even external contributors such as subsystem providers and software developers play a part. Ensuring security starts with giving the right access to machines and features. Keeping a clear overview prevents mistakes. Making sure your IoT portal is easy to use is key for everyone.

IXON offers a user system that's easy for everyone. When someone's invited, they get a clear email invitation. They can set up their account and log in securely with just one click.

### **Key Features**

- Create your own user groups and roles.
- ✓ Create groups such as "Distributor," "Service Region," or "Customer".
- Two-factor authentication (2FA) for added security.
- ✓ Audit trail that makes it easy to see who did what.
- ✓ Log in with Microsoft or Google accounts.

IXON makes managing your IoT portal easy and efficient, thus making it more secure.





Company invite

Propack Machinery <noreply@ixon.cloud> aan Edith Vreeker

You've been invited to join Propack Machinery

Press the button below to accept this invitation and start making use of insight.propack-machinery.com.

#### ACCEPT INVITE

This link is valid until 9/10/24 8:15:11 AM

Kind regards, Sion de Rijcke, Propack Machinery

You are signed up for insight.propack-machinery.com with edith.vreeker@gmail.com. Not interested? Ignore this email or let us know.
Powered by IXON B.V.

Example of email invitation for users

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### **Customer Portal**

Sharing insights, empowering machine uptime

Your clients don't seek another analysis tool; they want guidance, practical advice that keeps their machines running smoothly. Knowledge to improve your machines lies within your organization, but how do you convey it to your customer?

At IXON, the customer portal takes center stage. Here you can share your knowledge and insights with your customers. With IXON Cloud, you can set up your own customer portal within hours, without worrying about maintaining the platform yourself.

### **Key Features**

- No user-based licenses: Invite unlimited users based on your needs.
- Multi-Language Support: Users can choose their preferred language.
- Personalized Invitations: Users receive tailored email invitations for a warm welcome.
- Self-service: Empower your customers to manage their own user accounts.
- App or Web Availability: Access the portal as an app or web application.
- Tailored Pages: Create main pages for your ticket system, webshop, or support data.
- Machine-centric Pages: Customize pages for each machine, designing your menu structure.
- Machine Cards in Overview: Display machine Cards for quick access to essential functions.

#### White Labeling

Customize your customer portal entirely to match your brand.

- Your brand: Set up your logos and brand colors.
- Your domain: Use your own domain

(e.g. login.yourcompany.com).

- Your App: Offer your unique White-labelled smartphone app on App Store and Play Store.
- Your user invitation: Send branded invitation emails to your users.
- Your terms: Incorporate your personalized Terms of Use (ToU) and Privacy Statement.
- Your device: White-label the Edge Gateway with your own front-foil design.

With IXON, your customer portal becomes a true extension of your brand.









### **Data Studio**

#### Uncover insights, improve performance

Improving a machine's performance halfway across the globe has a single path – through data. How does a machine function? What are its most frequent error codes? How much downtime do these issues trigger? What's the production throughput? And how are the machine's components, servo-drives, and more faring? When's the right time for component replacement, gauged by rotations or movements? In which part of the machine is most energy consumed and when? When were the settings last modified and what was the setting when the machine was commissioned?

All these answers reside within your machine. IXON Cloud aggregates this data, allowing you to view and analyze insights from anywhere on the globe. And when you identify what data matters to your customer, it's swiftly showcased through your Customer Portal.

### **Key Features**

- Log with the IXON Edge Gateway: reliably read and send PLC data to IXON Cloud.
- Build reports and dashboards with a wide range of drag-and-drop widgets and apps.
- Real-Time Monitoring: Visualize real-time machine values within IXON Cloud using Live Data.
- Historical Insights: Store data in IXON Cloud and analyze specific time periods.

- Scheduled Reports: Easily schedule automatic sending of reports via email (in PDF format).
- High-speed logging: Log 1,000+ data tags per machine at high resolution, up to 50 ms intervals.
- Data compression: Data storage in time series databases with high compression to reduce costs.
- Reliable data transfer: IXON's Edge Gateways offer Store and Forward functionality with local flash memory which, even during temporary internet outages, ensures data is transmitted reliably.

#### Reports

Easily share reports via email (in PDF format)

	Performance Overview	9/15/2024,12:14:PM		Performance Overview	9/15/2024, 12:14 PM
achine state			Wear and tear		
			Name	Progress	Limit expected on
			Change knife 28/323	1273/5000 hours	08-05-2024
			Change knife 28/453	487W5000 hours	23-03-2024
ep 5 Sep 6	Sep 7 Sep 8 Sep 9 Se	p 10 Sep 11 Sep 12	Conveyor Belt 3/203	258/3500 hours	18-08-2026
	- Running - Maintenance - Error		Conveyor Belt 4/102	328/3500 hours	03-06-2026
allability	Quality	Performance	Inspect pneumatics	24/200 hours	18-08-2024
and the second sec	amont a				
99,7 %	95,2 %	84,1 %			
22)1 .0	2012 .0	0.,			
te.	Production overview				
:6	Broken boxes	21568			
	Broken boxes Good boxes	144024			
<sup>**</sup> 79,8 %	Broken boxes				
	Broken boxes Good boxes	144024			
	Broken boxes Good boxes	144024			
	Broken boxes Good boxes	144024			
79,8 %	Broken boxes Good boxes	144024			
<b>79,8 %</b>	Broken boxes Good boxes	144024			
<b>79,8 %</b>	Broken boxes Good boxes	144024			
<b>79,8 %</b>	Broken boxes Good boxes	144024			
79,8 %	Broken boxes Good boxes	144024			
<b>79,8 %</b>	Dolan Long				



9	Wear and tear				
	Name	Progress	Limit expected on	Contraction in the Contraction of the Contraction o	and a reason
	Infeed belt	4773/5000 hours	10/02/2025	August - La	
	Main belt	4279/5000 hours	22/05/2025		
	Outfeed belt	2879/5000 hours	25/08/2025		
	Cutting unit	843/10000 cuts	25/01/2026		
	Tape dispenser	4879/200000 cuts	29/08/2026		I I I
				I III	I
	Service logbook		+	Add note Documentation	+ Add document
	Who	When	Note	Name	Size
	Sion de Rijcke	22 November 2024 at 11:23	Main belt replaced, reset wear and tear componen		12 MB
	Edith Vreeker	17 November 2024 at 16:04	Conveyor bearings replaced	Commissioning_report.pdf	12 MB
	Bas Rameckers	15 November 2024 at 09:12	Planned maintenance: Ticket 0001024587. Adjust settings via the HMI.	ed Electrical_diagram.pdf	567 kB
	Robert Althuis	08 November 2024 at 14:26	Checked for misalignment of conveyor belts.	Maintenance_manual.pdf	300 kB
	Sion de Rijcke	02 November 2024 at 08:45	Planned maintenance: Ticket 0001025328. Clean heaters and pressure plates of accumulated glue.	pottom of	
			nation and house of house of a construction plane.		
	Current monitori Main drive	ng			
	1K 750 250 0	front from from			

Insight into wear parts, with expected replacement dates.



Analysis of downtime with machine status, alarm occurrences, and downtime per alarm.



### Notifications

Inform your customer when your machine needs attention

A machine that is down costs money. Operators must be informed immediately, in order to get their machine up and running again as soon as possible. Ideally, you take action even before the machine has stopped. For example, when certain supplies are running low or when maintenance is due. This information must reliably reach the right person, even when people change.

IXON Cloud makes sending notifications easy. You can send them via email, push messages, or webhooks.

### **Key Features**

- Email and App Alerts: Notifications can be sent as emails or push messages in the app.
- Set Alarm Conditions: You decide when and why notifications are sent based on specific conditions.
- Tailored Instructions: You can add instructions to each notification, making it clear what to do.
- User Groups: Different users get specific notifications tailored to their roles.
- Personal Message Inbox: Each user has their own inbox, where they can choose how they want to receive their notifications.
- Cloud Connection Monitoring: Notifications can be sent when the connection to Edge gateways is lost or reestablished.
- Link with Other Tools: Connect IXON Cloud notifications with other software like Incident Response platforms or ERP systems.





IXON Cloud's notification system ensures that critical information gets to the right person at the right time, helping you avoid downtime and make informed decisions.

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## **Edge Gateways**

Reliable and secure connectivity

Connect your machine to IXON Cloud and be ready for Remote Access and your own IoT service platform.

### **Security first**

- Robust security measures with the Hardened Secure OS by IXON.
- Compliant with IEC-62443 and ISO-27001 standards.
- Integrated firewall to safeguard the machine network from the factory network.
- Optional OT port for isolating the factory network from the internet.

### **Effortless Setup**

- Registration with IXON Cloud in just 1 minute.
- Fully configurable from IXON Cloud.
- Touchscreen for swift troubleshooting and access to commonly used settings.

#### **Docker Apps**

- Deploy Docker applications for various purposes such as security enhancements or machine insights.
- Examples include: Network inspection, PLC backup, pre-alarm video recording, Node-RED, TensorFlow, SOCKS5 proxy, Grafana, MQTT brokers, etcetera.
- Discover more at marketplace.ixon.cloud





SecureEdge Pro Edge Gateway



	IXrouter3		SecureEdge Pro *					
	IX2400	IX2410	IX2405	IX2415	IX6000	IX6010	IX6005	IX6015
Wi-Fi Client and Hotspot		~		~		V		~
4G Global			~	~			V	~
GPS							V	~
Ethernet ports (all 1Gbps)	4 x LAN	, 1 x WAN (fa	ctory network	/ cloud)	4 x LAN, 1 x WAN (factory network / cloud) 1x configurable port for LAN or factory network			
CPU	MIPS 880 Mhz				ARM Quad-core 1.8Ghz + NPU			
Memory		256M	B DDR3			4G	B DDR4	
Storage	16MB SPI flash 8GB flash for data logging			32GB eMMC in pSLC mode for reliability, with 5GB user space				
Expandable storage	n/a Yes, PCIe SSD in M.2							
Temperature	-20°C to 55°C -20°C to 55°C							
VPN speed (TCP/UDP)	Approx 10 Mbit/s Approx 30 Mbit/s							
Docker Apps	n/a Yes, with SDK and standard apps at https://marketplace.ixon.cloud							
Touchscreen	n/a For status information, quick registration access to most common settings							
IXON Data Logging	Protocols OPC-UA, Modbus TCP, Siemens S7, EtherNet/IP, MELSEC, BACnet/IP and plain-text TCP Interval: up to 50ms; store-and-forward on local flash memory to avoid data loss To IXON Cloud or 3rd party cloud providers via MQTT							
Security	VPN sessions encrypted using SSL/TLS protocol and authenticated using x509 SSL certificates							
Other software features	Remote access via USB-over-IP, local NTP server to keep your machine's time synced, local API for status and configuration from PLC							
Certifications	CE, cUL, FCC, AT&T, Verizon, Anatel, NBTC							
I/O		1 Digit	tal Input		Configurable pin for Input or Output			
Other hardware		USB 2.0	) (type A)		U	SB 3.0 (type C	), eSIM and TI	PM 2.0
Dimensions (excl. DIN rail mount)		111x95x28 n	nm (H x D x W	)	111x111x45 mm (H x D x W)			





### **Open Platform** Unlimited possibilities

IXON should never hinder your success. Your IoT platform should not be a custom-made application, but a solid product from a reliable supplier. It must be continuously maintained and also used by other companies. Additionally, you should have the ability to customize it yourself to meet your specific needs.

That's where IXON comes in. IXON is an open platform, ready to adapt to your needs. It integrates with other systems and accommodates custom or third-party apps in the IXON Cloud. This flexibility keeps you moving forward without constraints.

### **Key Features**

- App Engine: Create custom User Interface Components and Cloud Functions for your specific functionality.
- API Power: IXON Cloud's full functionality can be accessed through APIs for automation and integration.
- Resources Available: Access MongoDB object storage and File storage for your apps.
- Developer Support: Detailed developer documentation available at <u>https://developer.ixon.cloud</u> and training sessions are available for developers.
- Local Solution Partners: IXON's network of solution partners can provide close assistance and expertise.
- Speed and Security: Rapid market entry and top-notch security with a strong IXON foundation.

IXON's open approach empowers you to innovate and adapt freely, ensuring you're always at the forefront of technology.







colleagues.

Built by partner (9)

3D model.

Power BI, using a 90-day free trial.

For inspiration, visit marketplace.ixon.cloud



### Security IXON is a mature organisation with a reliable infrastructure

The manufacturing industry is a prime target for cybercriminals. They can demand hefty ransom payments because manufacturers cannot afford downtime and have money to pay. Hackers can quickly see a return on their investment (time) in targeting these often easy to hack systems.

For IXON, security is our number one priority. We go above and beyond to ensure that you can deliver secure machines and minimize the risks your customers may face.

### **Key properties**

- ✔ Worldwide server network distributed over 17 datacenters
- Transparent communication via <u>status.ixon.cloud</u>
- Data stored within EU
- Security, Information and Event Management (SIEM) system in place to detect suspicious network traffic

### Certifications

- ✓ ISO-27001 for information security (IXON full scope)
- ISO-27017 for cloud computing
- ISO-27701 for data privacy
- ✓ ISO-9001 for product quality and customer satisfaction
- IEC 62443-4-1 and 4-2 compliant



#### The Benefits of SaaS

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SaaS stands for Software as a Service, which means ready-to-use software delivered as a service. You don't need to create your own application on a PaaS platform. This results in quicker market entry, minimal to no development costs, and eliminates concerns about future maintenance and security.

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### Service We are here to help

Your focus is on designing and deploying new machines that elevate production to a new level. To thrive, it's essential to be surrounded by strong partners.

IXON is fully committed to assisting you with machine connectivity, security, service enhancement, and developing new service models.





### **Solution Engineering**

Evaluate technical feasibility and define project requirements.



### **Development Support**

Access to code examples, 1:1 support, and code reviews on quality, security, and performance.



#### **Integration Partners**

Global network of integration partners for app development and business consultancy.



Unlimited email and phone support during office hours.



### Trainings

Trainings and workshops for a quick and effective start.



### Legal & Security Desk

Get assistance with cybersecurity, IEC-62443, GDPR, NIS, data ownership, IT risk questionnaires, and more.



# Pricing

Choose the plan that suits you best

Standard	Advanced	Professional	Enterprise
Premium Remote Access solution. Secure access for you, your suppliers and customers.	More extensive management of your machines and subcontractors.	Data insights and notifications for everyone to minimise downtime.	Everything for a profitable digital service model.
Includes:	Includes:	Includes:	Choose your modules:
<ul> <li>Unlimited users and machines</li> <li>Unlimited concurrent connections</li> <li>VPN access</li> <li>WebAccess (webVNC and webHTTP)</li> <li>Map view</li> <li>Fleet management</li> <li>SSO with Google and Microsoft</li> <li>IXON Smartphone app</li> <li>Advanced user and device management</li> <li>Two-factor Authentication</li> <li>Remote Firmware Upgrades</li> <li>Support during business hours</li> </ul>	<ul> <li>Everything from Standard</li> <li>White Labeling</li> <li>Temporary Access</li> <li>LAN Access Management</li> <li>Custom fields</li> <li>10GB file storage</li> </ul>	<ul> <li>Everything from Advanced</li> <li>Your own domain (e.g. login.yourcompany.com)</li> <li>Live Machine Data view</li> <li>Machine Cards in the overview</li> <li>Drag &amp; drop widgets</li> <li>Alarming for all machines</li> <li>Connection monitoring for all machines</li> </ul>	<ul> <li>Everything from Professional</li> <li>White Labelled Smartphone App</li> <li>Data Studio (incl. Asset Management)</li> <li>Managed database</li> <li>Asset Management</li> <li>Report Generator</li> <li>App Engine</li> <li>API / Integrations</li> <li>M2M Cloud Cluster</li> <li>Custom Single Sign-on</li> <li>SLA - 24/7 Support and 99,9% uptime</li> <li>Custom ToU and Privacy statement</li> </ul>
Free	ixon.cloud/pricing	ixon.cloud/pricing	Request quote

### Leading Machine Builders go for the best





Eager to discover the platform by yourself? Request your Evaluation kit

info@ixon.cloud +31 85 744 1105 www.ixon.cloud