



Hikar Industrial IoT

In Strategic Partnership with



[www !\[\]\(c3d993ca47bfe2a953c700506ce31fa0_img.jpg\) https://hikartech.com/#contact-us](https://hikartech.com/#contact-us)



Advanced Automation | Smart Machine | Digital Factory



Industrial Revolution...

INDUSTRY 1.0



1784

Mechanization,
Steam power,
Weaving loom

INDUSTRY 2.0



1870

Mass production,
Assembly line,
Electrical energy

INDUSTRY 3.0



1969

Automation,
Computers and
Electronics

INDUSTRY 4.0



TODAY

Cyber-Physical
Systems, Internet of
Things, Networks



**PHOENIX
CONTACT**

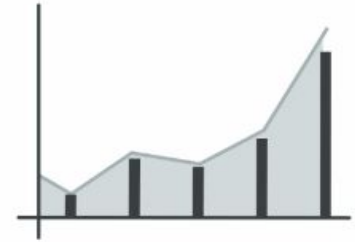
Our Area Of Focus...



SAFETY



UPTIME



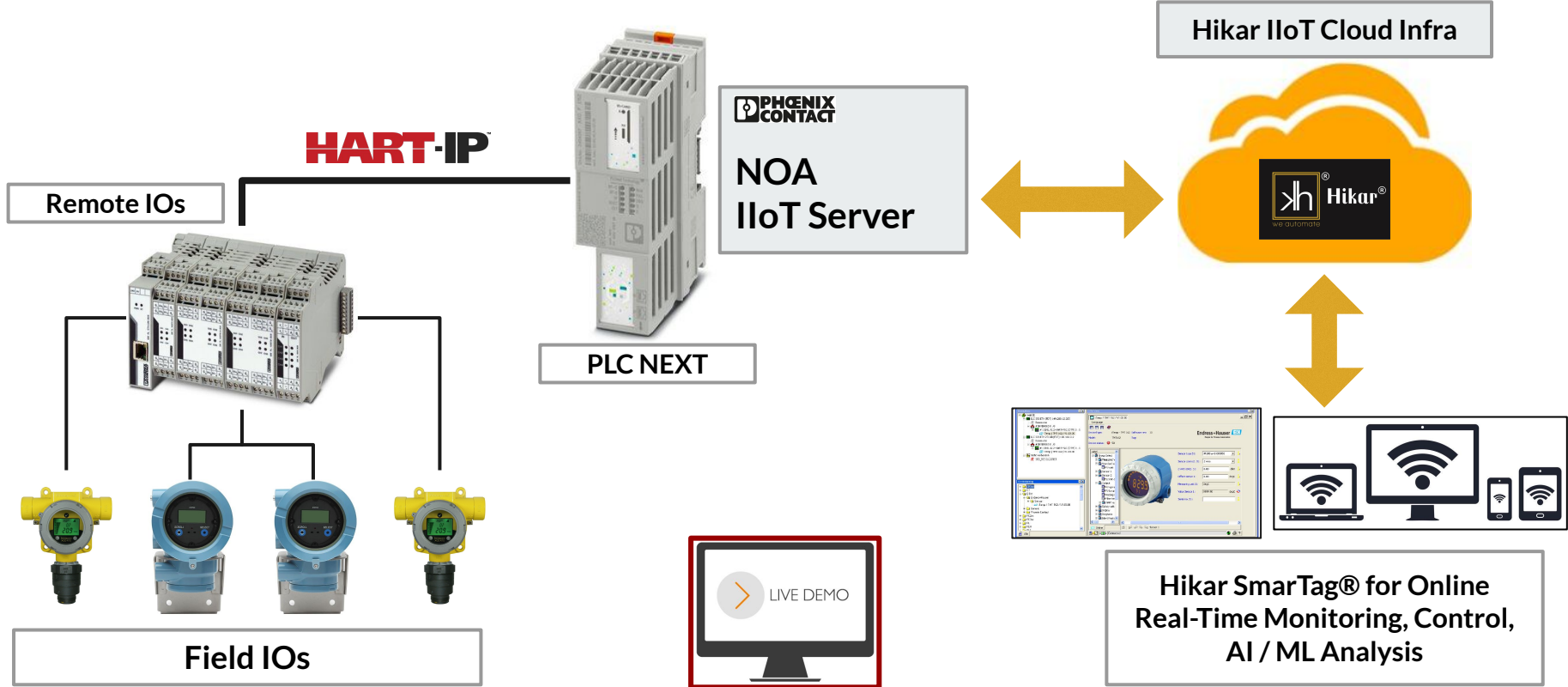
PRODUCTIVITY

\$50 billion

lost in unplanned downtime around the world's industries affecting
Safety & Productivity



AMS on Cloud - IIoT Based Field Instruments Asset Health Monitoring





Remote Calibration, Central Access & Prediction of Asset Health

We are the member of the FDT group

The screenshot shows a software interface for remote calibration and asset health prediction. The main window displays a tree view of the device hierarchy, including ILC 350 ETH (FDT) and ILC 370 ETH 2TX-IB (FDT). The right pane shows the configuration for a temperature sensor (Temp / TMT 162 / V1.03.00), including device type, model, and status. A central image of the sensor is shown with a digital display reading 82.99 °C. The bottom status bar indicates the device is online and connected.

PC Work - mein fdt

Temp / TMT 162 / V1.03.00

Language: [dropdown]

Device type: iTemp - TMT 162 Software rev: 30

Model: TMT162 Log: [dropdown]

Device status: 50

Endress+Hauser **EH**
People for Process Automation

Sensor type S1: Pt100 a=0.003850

Sensor connect. S1: 2 wire

2-wire comp. S1: 0.00 ohm

Offset sensor 1: 0.00 degC

Measuring Unit S1: degC

Value Sensor 1: 9999.90 degC

Serial no. S1: [input field]

82.99 °C

Online Connected

Call: FdtIntr.Changed, DeviceIntr.Changed SystemTag: iTemp / TMT 162 / V1.03.00
Call: IDData.Events.OnFunctionChanged - : iTemp / TMT 162 / V1.03.00

Code Fehler Warnungen Infos SPS-Fehler Drucken Buskonfigurator FDT Container /

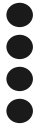
Drucken Sie F1 für Hilfe





EMS on Cloud: Centralized IIoT based Energy Monitor, Management and Saving Modules

Hikar IIoT Cloud Infra



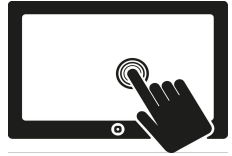
Energy MFM



Hikar SmarTag® for Online Real-Time Energy usage Monitoring, Reports & Forecasting



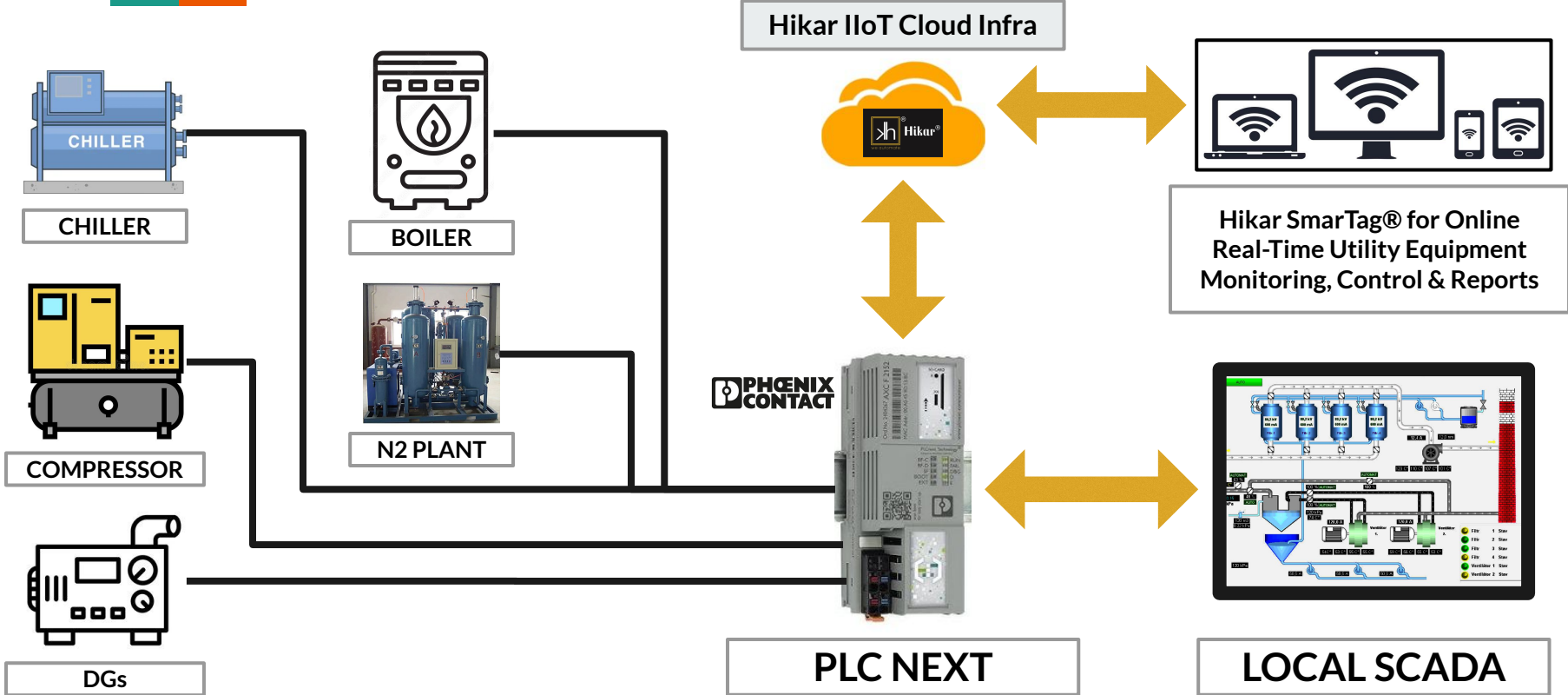
PLC NEXT



Energy Usage - Integration With Enterprise Resource Planning System



IIoT Based Centralised Utility Management with Cloud / Local SCADA



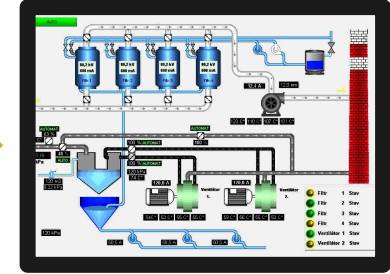
HIKAR IIoT Cloud Infra



HIKAR SmarTag® for Online Real-Time Utility Equipment Monitoring, Control & Reports



PLC NEXT



LOCAL SCADA

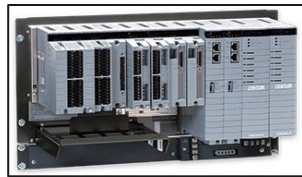


DCS - IIoT Integration: Monitoring of DCS critical Parameters Remotely on Smart Devices



ABB

ABB DCS



YOKOGAWA

YOKOGAWA DCS



EMERSON

EMERSON DCS

Hikar IIoT Cloud Infra



Hikar SmarTag® for Online Real-Time Monitoring of DCS Critical Parameters Remotely

Alerts: SMS & Email

Real-Time Remote Monitoring & Control

Tag Data Collection

Advanced Data Analysis Tools

Data history & Trends



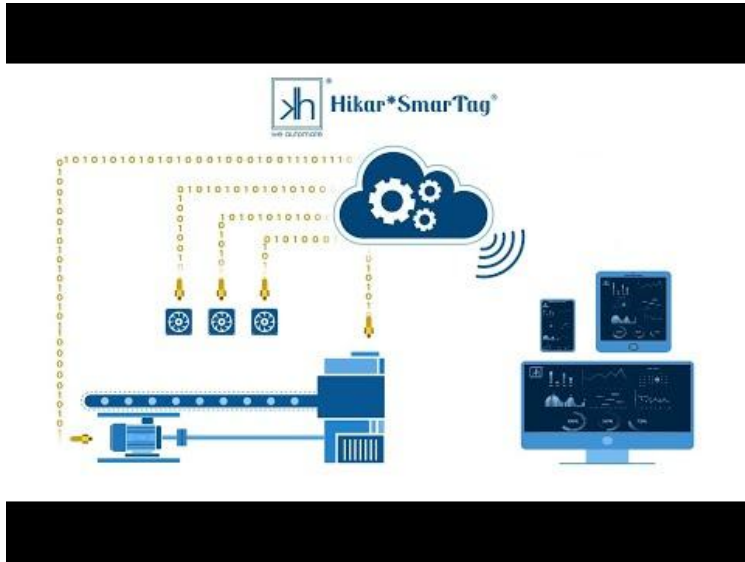
Critical Parameters



PLC NEXT



SmarTag® - Listen To The Heartbeat Of Your Machines...

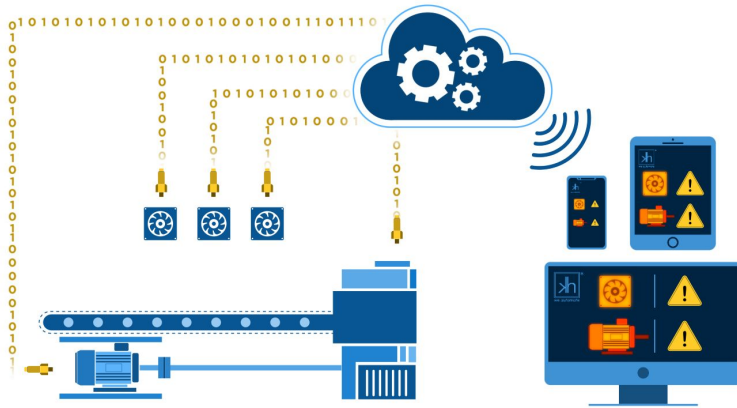


**Real-Time, Online Operations,
Monitoring & Maintenance Of
Machines & Plants From Anywhere In
the World.**

See Future Failures in Advance



Smartag® - Listen To The Heartbeat Of Your Machines...



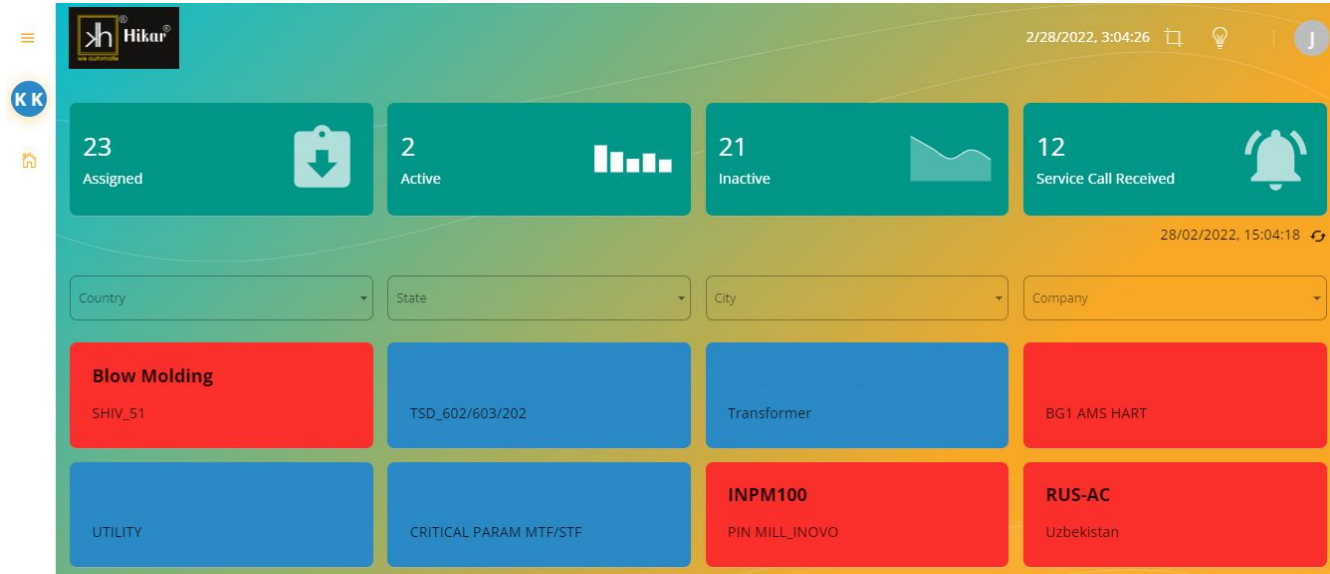
- Smartag® is end-to-end AI/ ML based Industrial IoT solution bringing intelligence to the machines and Plant with **zero additional investment**.
- Providing predictive alerts on asset health to see the future failures of machine equipments in advance
- Benefits: increased productivity, decreased unplanned downtime, improved service quality & reduced manufacturing costs.



Hikar Provides Industrial IoT environment where your equipment monitors itself and lets you know when it needs maintenance before adversely impacting Safety, uptime & Productivity.



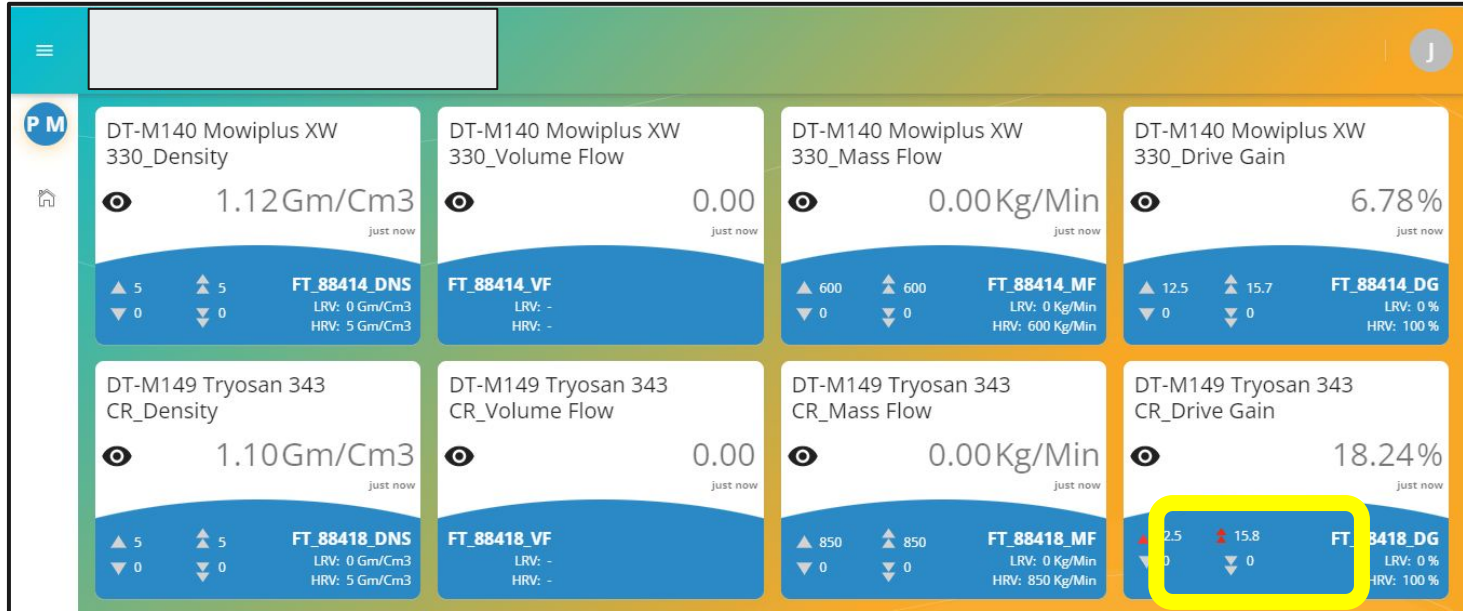
SmarTag® - CLOUD PLATFORM



Customized overview Dashboard for all the machines & plants, installed at different locations, to real-time online monitor from the single cloud platform.



Online Real-Time Parameter Monitoring



Real-time Online monitor & control of each machine / plant parameters from the dashboard.



Online Real-Time Parameter Monitoring

The dashboard displays machine information for FT_83908 and FT_83902. The 'Monitor' tab is active. The alerts section shows two tables of parameters with their current values and setpoints.

FT_83908			
Tag Comment	Value	Unit	Alerts & SP
STM1007 Indofil850_DN	1.19	Gm/Cm3	▲ 1.5 ▲ 2.0 ▼ 0 ▼ 0
STM1007 Indofil850_VF	0.00		
STM1007 Indofil850_MF	0.00	Kg/Min	▲ 100 ▲ 100 ▼ -10 ▼ -20
STM1007 Indofil850_DG	9.69	%	▲ 30 ▲ 50 ▼ 0 ▼ 0

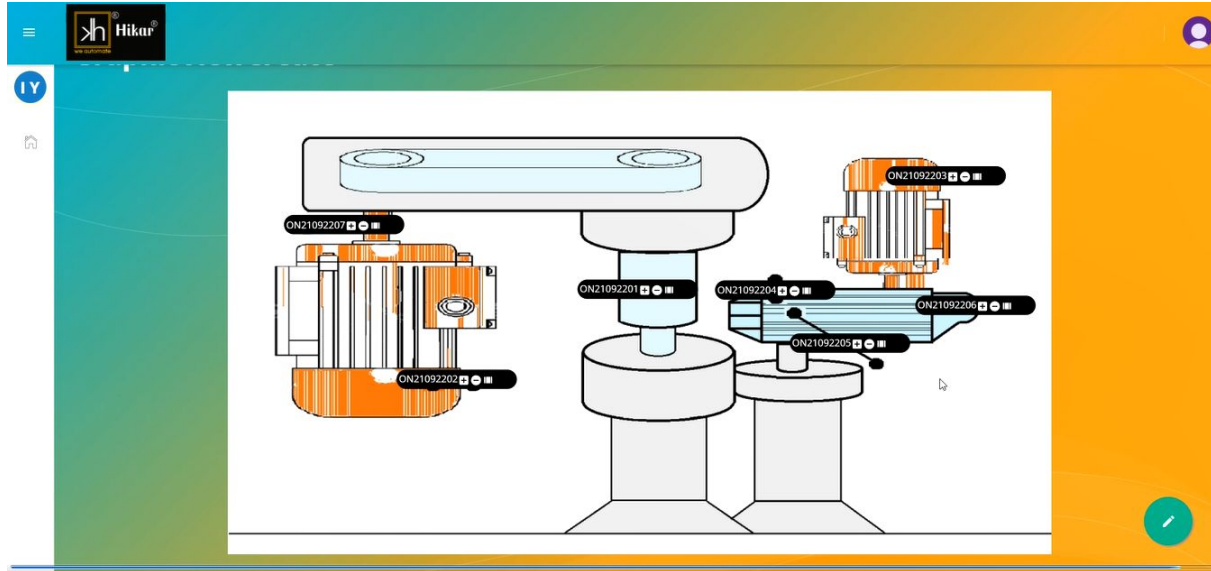
FT_83902			
Tag Comment	Value	Unit	Alerts & SP
STM1005 Prypln Glycl_DN	0.00	Gm/Cm3	▲ 1.5 ▲ 2.0 ▼ 0 ▼ 0
STM1005 Prypln Glycl_VF	0.00		
STM1005 Prypln Glycl_MF	0.00	Kg/Min	▲ 600 ▲ 600 ▼ -10 ▼ -20
STM1005 Prypln Glycl_DG	0.00	%	▲ 30 ▲ 50 ▼ 0 ▼ 0



Real-time Online monitor & control of each machine / plant parameters from the dashboard - **Table View.**



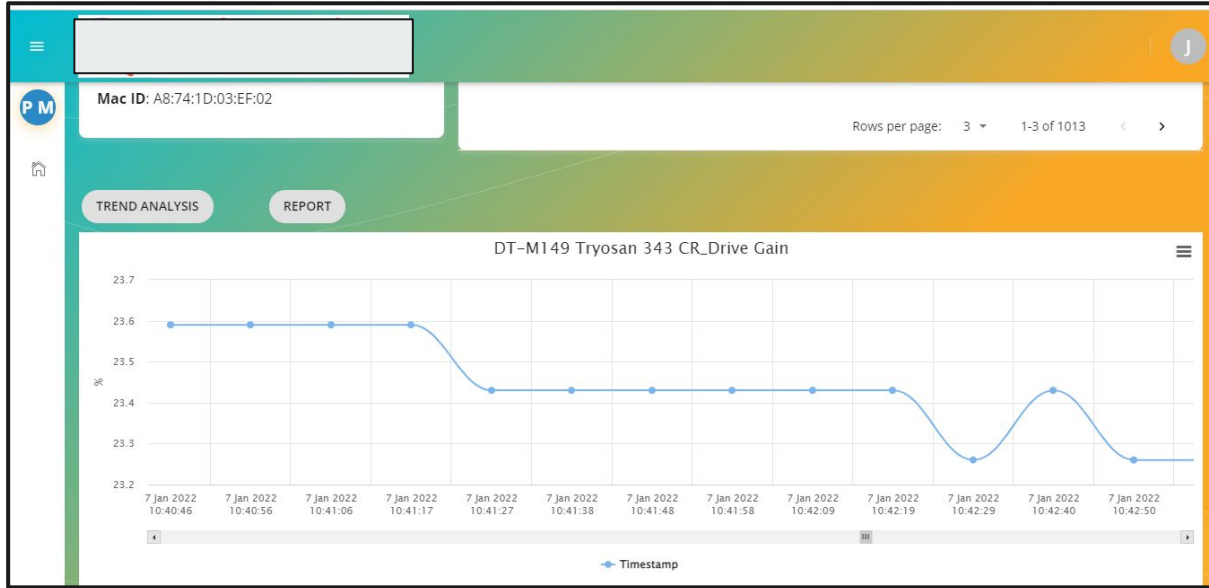
Online Real-Time Parameter Monitoring



Real-time Online monitor & control of each machine / plant parameters from the dashboard - **Graphic View.**



History, Reports & Trends



History & trends of each parameter of machine and plant for the detailed analysis, maintenance & troubleshooting



History, Reports & Trends

Tag No:	FT_83908_DG	
Value	Date	Time
9.64	02/28/2022	3:45:59 pm
9.68	02/28/2022	3:45:49 pm
9.68	02/28/2022	3:45:38 pm
9.66	02/28/2022	3:45:28 pm
9.69	02/28/2022	3:45:18 pm
9.69	02/28/2022	3:45:07 pm
9.69	02/28/2022	3:44:57 pm
9.68	02/28/2022	3:44:47 pm
9.68	02/28/2022	3:44:36 pm
9.66	02/28/2022	3:44:26 pm
9.69	02/28/2022	3:44:16 pm
9.69	02/28/2022	3:44:06 pm
9.66	02/28/2022	3:43:55 pm
9.68	02/28/2022	3:43:45 pm
9.68	02/28/2022	3:43:35 pm



History & trends of each parameter of machine and plant for the detailed analysis, maintenance & troubleshooting



Alerts On Dashboard

The screenshot shows a mobile dashboard interface with an 'Alerts' modal window. The modal window contains a table with the following data:

Date	Time	tagName	message	State	action	note
01/07/2022	12:48:26 pm	FT_88418_DG_H1ALM	FT_88418_DG HI ALM	ON	<input type="checkbox"/>	Note
01/07/2022	12:48:17 pm	FT_88418_DG_H2ALM	FT_88418_DG HH ALM	ON	<input type="checkbox"/>	Note
01/07/2022	12:45:09 pm	FT_88414_MF_L1ALM	FT_88414_MF LO NR	OFF	<input checked="" type="checkbox"/>	Note
01/07/2022	12:45:09 pm	FT_88414_MF_L2ALM	FT_88414_MF LL NR	OFF	<input checked="" type="checkbox"/>	Note
01/07/2022	12:45:00 pm	FT_83907_MF_L2ALM	FT_83907_MF LL NR	OFF	<input checked="" type="checkbox"/>	Note

At the bottom of the modal, there are buttons for 'REVIEW ALL' and 'CANCEL'. The background dashboard shows various machine status indicators and a 'Maintenance' section.



Alerts, Email & message on the occurrence of critical event with overview blinking of machine & plant for quick action.



Alerts On Email & SMS

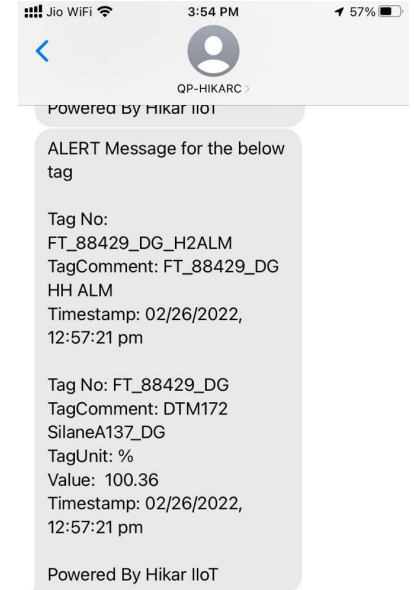
Alert - Hikar IloT

Hikar IloT <info@hikartech.in> To and 9 others 2:51 PM

Reply Reply all Forward Delete

TagName	TagComment	Alert Message	Timestamp
FT_88427_DG_H1ALM	FT_88427_DG ALRM STS	FT_88427_DG HI ALM	02/28/2022, 2:51:54 pm

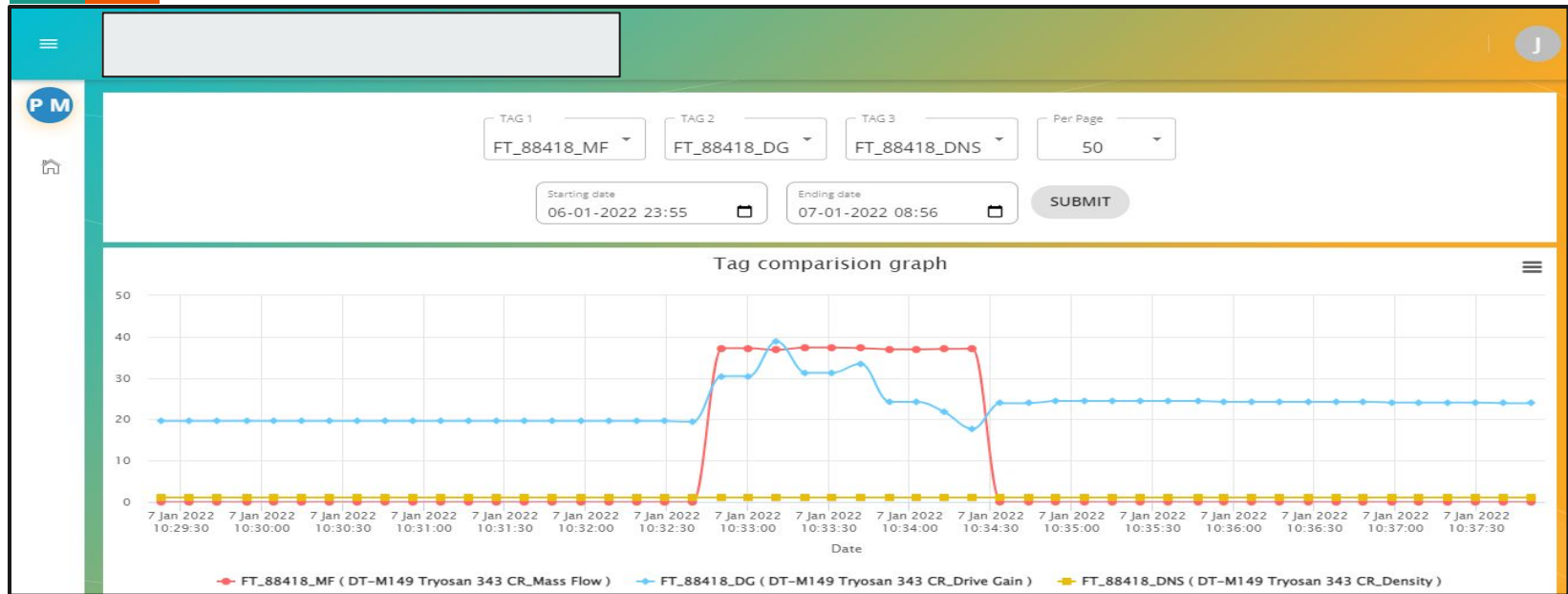
TagName	TagComment	Value	Unit	Timestamp
FT_88427_DG	DTM170 Ortn1288_DG	30.04	%	02/28/2022, 2:51:54 pm
FT_88427_DG_L1	FT_88427_DG SP LO	0	Kg/Min	02/21/2022, 6:14:14 pm
FT_88427_DG_L2	FT_88427_DG SP LL	0	Kg/Min	02/21/2022, 6:14:18 pm
FT_88427_DG_H1	FT_88427_DG SP HI	30	Kg/Min	02/23/2022, 3:43:17 pm
FT_88427_DG_H2	FT_88427_DG SP HH	50	Kg/Min	02/22/2022, 2:27:05 pm



Alerts, Email & message on the occurrence of critical event with overview blinking of machine & plant for quick action.



Advanced Analysis: Trend Comparison



Multiple Trend comparison of parameters for advanced insights & analysis for optimized quality control & troubleshooting.



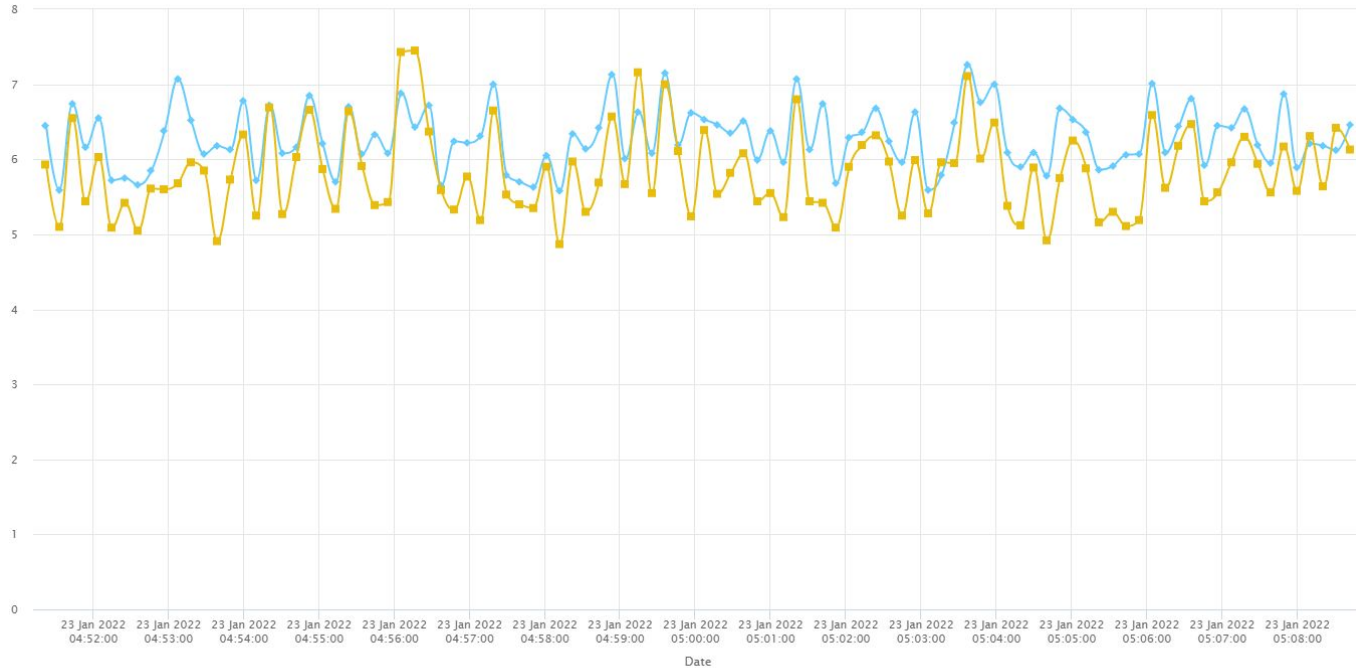
Advanced Vibration Component Analysis





High Speed Vibration / FFT data components

Tag comparison graph





**PLC NEXT: A POWERFUL REMOTE ACCESS IoT
GATEWAY**



LOCAL DASHBOARD



REMOTE SCADA

CLOUD DASHBOARD

ADVANCED DATA ANALYSIS TOOLS

For **All Connected Devices (ILCs Too!)**





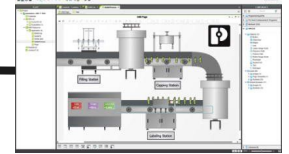
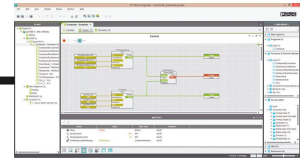
PLC NEXT



Remote Access:
All Networked Device

WEB HMI:
All Networked HMI

CLOUD SCADA/ HISTORY / TRENDS/ REPORTS



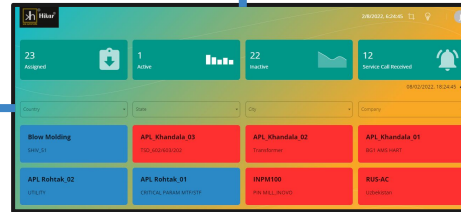
Alerts: SMS & Email

Real-Time Remote
Monitoring & Control

Tag Data Collection

Advanced Data Analysis Tools

Data history & Trends



In Dialog With Customers And Partners Worldwide

Hikar is a globally present, India-Based technology company focused in the field of industrial IoT (IIoT) 4.0 and Smart Manufacturing Solutions with industrial Automation. A global Network across more than 4 countries, and 150 employees ensure a close proximity to our customers, which we believe is particularly important. With Our Innovative Products and solutions, we take responsibility to make our clients competitive in the world market and to make Manufacturing more profitable than ever before. Along with this, manufacturing innovation realizes digital transformation, Creating innovative solutions for specific industries and requirements with the right technology and that is what drives us. Now is the time to start ! To innovate and operate in a more flexible, cost effective and sustainable way Realize your digital transformation with Hikar Industrial IoT.



You will Find More Details at: www.hikartech.com



Hikar® Technomation Pvt. Ltd.

Industrial Consultant - Project Designer

With Expertise in Predictive Maintenance and IoT based Smart Factory Solution

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HIKAR In Strategic Partnership With PHOENIX CONTACT



Our presence: India | UAE | Kenya | Uganda | Canada