



X-Force Digitalization

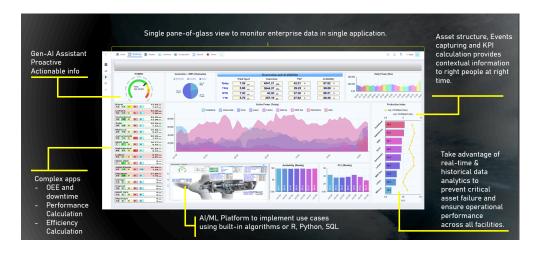
PLANT INFORMATION PLATFORM

Overview

X-Force Plant Information Platform (PIP) is an advanced historian system that collects, stores, and analyses real-time data from PLCs, SCADA, DCS, and IoT devices. Optimized for high-speed, high-volume logging, it ensures reliable access to historical process data for analysis, reporting, and compliance.

Unified Intelligence Platform for Operational Excellence

- Get a single-pane-of-glass view to monitor and manage all enterprise operations from one application.
- Enable Gen-Al-driven proactive insights to ensure timely, actionable decision-making.
- Leverage advanced analytics and AI/ML algorithms for predictive performance and KPI optimization.
- Drive operational efficiency, prevent asset failures, and unlock value from complex industrial data.



Value Delivered with X-Force PIP



App Engine

Use our pre-build or create your own logic in .net or python.



Asset Structure

Map raw data into actionable insight. Combine process data, engineering data, maintenance, commercial, documents, SOP, Analysis at single place.



Connect

OT – OPC-DA/UA, Modbus, DNP, IEC-61850, DLMS IT – ODBC, RESTAPI, IIoT - MQTT Collector Application for remote installation with store/forward capabilities



Alarms

Define Alarms on data point based on value, deviation, ROC, lookup table or combined conditions. Built in Alarm analytics. Audit / Trail Events for Operator Actions, Security and System Health.



History

High-performance process historian. 300K per server, 100K Samples/Sec per Server ,Scalable to 5M Tags with distributed architecture



Reports

Define reports based on real-time or aggregated data. Scheduled, Adhoc & Customized reports. Intuitive & self-explanatory Dashboard with Runtime changes



Graphics

Web & Mobile compatible UI/UX interface. Built in graphics library for industry applications.



AI/ML

Implement your ML use cases in real time with python or R. Inbuilt platform with more than 50 algorithms. Use Generative Al Assistant to answer from your own data, on-premises

Graphics Library



X-Force PIP Trends

- Visualize real-time and historical data trends to identify patterns, anomalies, and performance insights.
- · Empower operators and analysts with interactive, high-resolution charts for faster and smarter decision-making.



X-Force PIP Alarms & Reports

- Configure intelligent alarms based on thresholds, deviations, or complex logic with built-in analytics and audit trails.
- Generate real-time and historical reports with customizable formats for actionable insights.

X-Force PIP Report

- Generate real-time and historical reports from process and operational data.
- Customize reports to meet compliance, performance, and production needs.
- Schedule automated reports for timely insights and data-driven decisions.

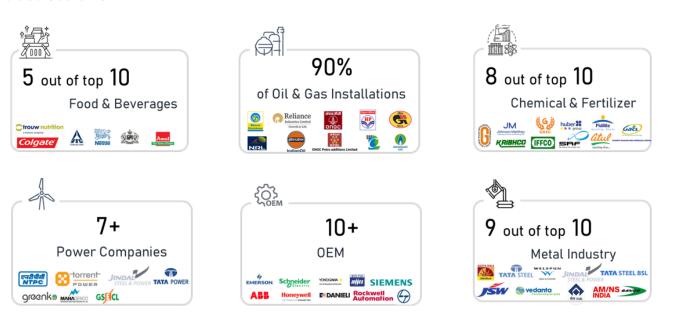
4	Α	В	C	D	E	F	Wtg Name	01-02-2023 02-	02-2023 03-02-2	2023 04-02-2023	05-02-2023 0	6-02-2023 07-02	-2023 08-02-202	3 09-02-2023	10-02-2023 1
1			Daily Generati	on Papart for	lamai	nwada	GZA01 GZA02	6.33	6.61	5.48 4.8i 5.61 4.8i	5.41	4.77	2.77 4. 3.02 5.	19 4.8	4.48
1							GZA03 GZA04	5.98 6.46	6.36	5.23 4.6		4.56	2.83 4.	84 4.58	
		WTG Actual Name	Wind Speed	PLF	Availability	Generation	GZA05	6.37	6.75	5.52 4.89 5.39 4.7	4.96	5.6 4.97	2.89 5.	46 4.85 22 4.76	4.48
2						Today	GZA06 GZA07	5.87	6.53	5 4.24 5.45 4.7	4.59	4.64	2.86 4.	67 4.42	
2		1144020	4.28	6.56	99.93	3306.00	GZA07 GZA08	6.3	6.87	5.5 4.7	5.07	5.11 5.25	2.89 5. 2.89 4.		
3		JMA038			99.95	3306.00	GZA09 GZA12	6.36	6.85	5.63 4.54 5.32 4.74		5.34	2.93 4. 2.55	63 4.8	
4		JMA041	4.40	9.38	99.86	4728.00	GZA13	6.11	6.86	5.72 4.5	5.06	4.84	2.89 5.	15 4.81	4.68
5		JMA042	4.65	9.73	99.93	4906.00	GZA14 GZA15	6.25	6.92	5.48 4.5 5.65 4.35	5.05	4,78	2.75 5. 2.79 4.	03 4.66 92 4.58	4.58 4.56
-							GZA16	6.82	7.5	6.13 4.85	5.5	5.24	2.75 5.	42 5.1	4.84
6		JMA044	5.42	14.80	99.86	7460.00	GZA17 GZA18	6.55 5.96	7.14 6.46	5.84 4.55 5.39 4.2	4.87	5.07 4.57	2.58 5.	6.1 4.81 05 4.8	4.72
7		JMA052	5.44	15.99	99.93	8058.00	GZA19 GZA20	6.54	7.24	6.01	5.22	5.15	2.68 5.	49 4.99	4.79
8		JMA053	5.36	11.64	99.17	5869.00	GZA21 GZA22	6.53 6.64	7.24 7.14	5.7 4.45 5.78 4.20		5.11 5.17	2.59 5.	21 5.01 i.2 4.87	5.08 5.03
9		JMA054	5.40			5638.00	GZA23 GZA24	6.86	7.56	6.37 5.39	5.5	5.15	2.74 5.	87 5.35	5
9		JMA054			99.72		GZA24 GZA25	6.35 5.77	6.94	5.63 4.13 5.49 4.14	5.25	5.03	2.69 5. 2.5 4.	13 4.85 74 4.84	4.94
10		JMA055	6.71	18.50	99.72	9326.00	GZA26 GZA27	6.05	6.65 7.32	5.56 4.29 5.91 4.3	5.48	5.3 5.24	2.52 4. 2.61 4.	45 4.96 51 4.92	4.98
11		JMA056	6.24	15.13	89.58	7626.00	GZA28	6.47	7.3	5.92 4.20	5.45	5.2	2.57 4.	57 4.82	4.89
							GZA29 GZA30	6.18	6.68	5.39 4.00 5.53 4.00	5 4.98	4.73	2.64 4. 2.63 4.	75 4.48 91 4.58	4,67 4,82
12		JMA057	6.24	16.21	99.86	8169.00	GZA31 DGR	6.68	7.01	5.91 5.66 Monthly Availiabilit	y Monthly Gene			.6 5.27	5.14
13		JMA100	4.89	11.68	99.86	5886.00) DGR	Monthly Windspe	Monthly PLF	Monthly Availabilit	y Monthly Gene	ration Downtime	summary (+)		
14		JMA102	5.14	12.00	98.82	6048.00		,							
15		JMA103	4.64	7.87	99.86	3967.00	A	В	С	Mo	nthly Availiab	Ility	G	н	
							Wtg Name	01-02-2023	02-02-2023	03-02-2023		05-02-2023	06-02-2023	07-02-2023	08-02-202
16		JMA104	4.85	9.72	99.93	4901.00	GZA01 GZA02	100		100	97,4193		100	100	
17		JMA106	4.27	7.83	99.86	3946.00	GZA03	100	100	100	100	100	96.9526	100	1
18		JMA108	4.48	6.41	98.89	3232.00	GZA04 GZA05	100		100	100		97.1575	100	10
19		JMA113	5.48	15.33	99.93	7728.00	GZA06	100	100	100	100	100	100	99.7569	1
							GZA07 GZA08	100		100	100		100	100	
20		JMA128	4.56	7.75	99.93	3906.00	GZA09	100		100	100		100	100	1
21		JMA131	4.37	9.15	99.93	4610.00	GZA12	100		100	100		97.7508	100	
22		1344424	4.50		00.00	F427.00	GZA13 GZA14	100		100	100		99.8426 100	100	1 1
22		JMA134	4.59		98.96	5137.00	GZA15	100	100	100	100	100	100	97.7662	1
23		JMA162	5.86	16.35	99.86	8240.00	GZA16 GZA17	100		100 99,5417	100		97.6826	100	1
24		JMA168	5.43	15.70	99.86	7915.00	GZA17 GZA18	100		99.5417	100		100	100	
							GZA19	100	100	100	100	100	97.787	100	1
25		JMA182	4.66	8.33	99.93	4199.00	GZA20 GZA21	100		100 99.9154	100		100	100	
26		JMA183	4.92	9.05	99.10	4559.00	GZA22	100	100	100	100	100	97.7535	100	0 1
27		JMA197	5.18	13.69	99.93	6901.00	GZA23 GZA24	100		100	100		100	97.2037	
28			5.15	15.03	99.86	7574.00	GZA25	100	100	100	100	97.2516	100	100	1
		JMA199					GZA26 GZA27	100		100	100		100	100	1
		JMA200	5.91	18.69	99.86	9421.00	GZA27 GZA28	100		100	99.6481		100	100) 1) 1
29							GZA29	100		100	100			100	1
		IMV303	5 5 5	16.05	99.92	8545 00							100		
30	WTG	JMA203 Down Time (+)	5.53	16.95	99.93	8545.00	GZA29 GZA30 GZA31	100 100 100 R Monthly Wins	100	100	100	100	100 100 97.5694	100 100	1

X - PIP Dashboard / Report and Mobile View

- Monitor plant performance through intuitive, real-time dashboards tailored to your operations.
- Generate detailed reports for analysis, compliance, and strategic decision-making.
- Access critical insights anytime, anywhere with a responsive mobile-friendly interface.



Our Valued Customer



X - PIP Summary

X-Force Plant Information Platform (PIP) is a high-speed historian system that collects and analyzes real-time data from PLCs, SCADA, DCS, and IoT devices. It ensures reliable access to historical data for analysis, reporting, and compliance. Integrated with an AIML Assistant, PIP offers advanced insights, predictive analytics, and automated decision-making to optimize operations.