XL HD Productivity Appliance

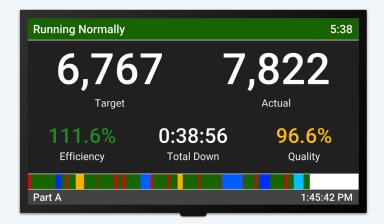
Vorne[™]

SMALL FOOTPRINT, HUGE IMPACT

Our proven platform for improving manufacturing productivity is now housed in hardware fit for your digital transformation. The XL HD is a 7.75" edge computing device with fully integrated hardware and software for monitoring and radically improving production. Simply connect power, hook up one or two sensors, and 100+ metrics and 20+ data dimensions are at your fingertips.



VISUALIZE YOUR PLANT FLOOR



Motivate your plant-floor team with a real-time scoreboard. Connect any size TV or flat panel. A 55" TV with five KPIs on-screen shows metrics as large as 5" for easy viewing at 100+ feet. The scoreboard changes context based on production state – providing your operators with the information they need, exactly when they need it.

The information-rich scoreboard is a key element of driving improvement, visualizing production for everyone and empowering your operators to "win the shift." Also, view your shift at a glance with the integrated chronogram.

ONE-TIME COST

- No software to install
- No contracts to sign
- No recurring fees
- Unlimited users
- Free software updates
- Free technical support
- 3-year warranty
- Volume discounts

Free 90-Day Trial

Try XL HD in your factory for 90 days with full technical support. Fun facts. 92.1% of companies who try XL, buy XL. XL is in 30,000 applications in 45+ countries. Almost all began with a trial!

INTEGRATED REPORTING SUITE

Visualize and leverage 100+ metrics and 20+ data dimensions with XL's integrated reporting suite - including 60+ built-in reports. Purpose-built for manufacturing and ready to drive immediate action. Explore your data with live controls. Pareto downtime, identify trends, analyze changeovers, deep dive into your OEE – see exactly what and where to improve.

Know your true downtime and what's causing it.

Many companies are shocked to discover their true downtime. Automatic down detection creates an accurate data foundation. You'll quickly gain insights that help you decide where to best focus your attention and resources.

Runn	Filling 2 Missing Reason 0.00.39 96.9% Efficiency		Filling 1 Running Normally 0.02:41 95.9% Efficiency	
9				
70.1 OEE	9,579 Good Count	74.3% OEE	9,914 Good Count	72.3% dee
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View manufacturing performance in real time.

See the real-time status of your process. Green means running. Red means down. Amber means changeover. Blue means not scheduled. Simple. And powerful. Operators and managers proactively act during the shift to create immediate value.

Down Time Labeling 1 V •

27

the causes of my down time? Labeling 1 👻

Identify top losses, see exactly where to improve.

Build a continuous improvement roadmap based on highly accurate and deeply insightful data. Know what to fix and where to invest. For fastest progress, pick the largest loss that you can improve without relying on outside resources.

Your top 5 losses ac	count for 39.39% of all losses (70	:07:14 of lost time).
1	21h:55	Your top loss is Bottling This loss decreased at a reasonable to the second sec
	12.3% of losses	 195,659 run cycles accour Learn about SIC, an impro
2	17h:50	Your next largest loss is This loss decreased at a read
_	10.0% of losses	 182,809 run cycles accourt

MTBF Labeling

0:12:37

Filling 1						
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						First Shift
	Hour 01 1.6%		lour 02 2.2%	Shift H 115		Shift Hour 97.8%
1,097	1,470	1,403	1,372	1,219	1,058	1,439
7:00 am			9:0	0 am		
un 12, 2023			Jun 1	2, 2023		

Identify patterns with a glance.

Spot shaky transitions. Down time after breaks. Late starts to shifts. Repeated down time after changeovers. Poor running after part changes. These are just a few examples of what you can see with the TPT. Get the big picture with a single glance.

ANY REPORT YOU CAN IMAGINE

Want to replicate an existing report? Prefer to create something entirely new and different? Craft any number of custom reports using drag-and-drop widgets. View the data you want to see, exactly how you want to see it. Filter. Sort. Compare. Act.

Create dashboards with widgets (Andon, Chart, Chronogram, Event List, KPI, KPI Group, Pivot Table, Table, and Top Losses), metrics (100+) and data dimensions (20+).

Good C Packi ♥ ♥ 7,355	≣ Target C Packi ♥ ♥ 6,716	Efficie Packir
+ Add Widget	+ Add Widget	+ Add Wide
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RIGHT INFORMATION, RIGHT PEOPLE, RIGHT TIME

Automated Alerts and Escalation

Subscribe to alerts, such as line down, running slow, production below target, or OEE below expectations. Define thresholds to automatically escalate as appropriate to supervisors and managers.

Email Reports

Subscribe to email production reports sent on shift, day, week, and/or month boundaries. Include key metrics, comprehensive loss information, and part run summaries.

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DRIVE ACTION ON THE PLANT FLOOR

See What Matters Right Now

Instantly see if you are running well, slowly, or with poor quality. See event times, down reasons, and targets for breaks, changeovers, and planned maintenance. Enable operators to course correct during the shift.

Make It Your Own

Display one KPI (best viewing distance) to five KPIs (most information) to keep your operators focused on what matters most. Select from 100+ metrics. We recommend starting with Target, Actual, Efficiency, Down, and Quality.

FLEXIBLE INTEGRATION

Built-In Tools

Includes features built directly into XL, such as Excel data export and arbitrary barcode matching for part numbers.

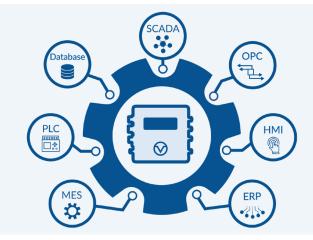
Built-In API

Includes a REST-based API to directly integrate XL with other systems and applications.

Add-In Tools

A wide range of prebuilt third-party tools greatly simplify integration projects, such as integrating with ERP/MES, OPC, PLC, and enterprise reporting systems.





IT PERSPECTIVE

XL HD is a highly integrated edge computing device with a powerful processing core, 4 GB of eMMC Flash (storing approximately one year's worth of historical production data), database, and web server. The OS is a thin Yocto-based Linux distribution designed for embedded and IoT devices. Security patches are included with software updates.

No software needs to be installed in your existing infrastructure. Use Chrome (best performance), Edge, or Firefox browsers to access XL. Every XL device uses the same data model and software, and from an IT perspective is managed the same way. The data collection architecture is robust even in environments with frequent network outages.

XL Enterprise provides services for XL devices. It is an entirely optional cloud-based application hosted on AWS using data centers located in the USA. XL Enterprise caches production data ephemerally (there is no long-term storage of this data).

TECHNICAL SPECIFICATIONS

Communication Ports

(1) IEEE 802.3, 10/100 Mbps, Auto-MDIX, RJ-45 Ethernet

(1) 2.0 USB-A Host, 500 mA current @ 5 VDC (2.5 W)

(1) HDMI Out

Power

24 VDC, 15 W

Environmental

0° to 50°C ambient

5% to 95% relative humidity (noncondensing)

Dimensions and Weight 7.75 x 7.75 x 2.00 in³ | 3 lbs 20 x 20 x 5 cm³ | 1.4 kg Processing Core

32-bit, 1 GHz ARM Processor

4 GB Flash Memory

512 MB RAM

Digital Inputs and Outputs

(6) 5 to 24 VDC, Sink or Source

(1) SPDT, 30 VDC at 1A, resistive load only Relay Output

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