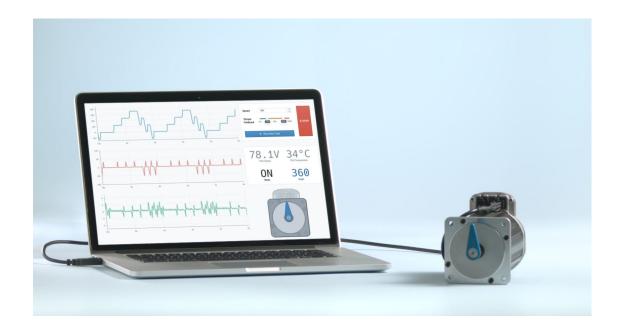
# **DATASHEET**



Electric UI equips engineers, researchers, and enthusiasts with tools to build cross-platform user interfaces for real-time hardware visualisation and control.



Accelerate your UI development with developer-first tooling and a hot-reloading sandbox, and leverage our extensive library of hardware-optimised UI components to fast-track your MVP.

Connect with an existing proprietary protocol, an industry standard, or start building quickly with our reference implementations to provide a first-class user experience for your embedded system.

# **Product Strengths**

#### **Connections**

End-users shouldn't struggle to find or select their device, flawless device provisioning and connections are the new normal.

Our hinting system provides automatic device discovery through integration with OS hot-plug events and industry standard network discovery protocols.

Seamlessly switch between supported links like USB, Serial, WiFi, BT, or HID at run-time, with automatic load balancing and fail-over out of the box.

### **DataTransformer Pipeline**

Quickly build post-processing workflows to manipulate and analyse data streaming from hardware.

Transformer functions are batched automatically for historical data while processing real-time streams.

## **Bespoke Charts**

Our in-house GPU accelerated charting engine provides best-in-class real-time performance.

Capable of handling >100k inbound events per second, and displaying million of points on-screen while maintaining smooth framerates.

Other features include optional decimation, userinteractions like zoom-windows and annotations, pervertex aesthetic controls, and more.

### **Perfect for Whitelabel Use**

Leverage a suite of mature hardware-focused UI components designed for performance, accessibility, and visual consistency across any desktop OS.

Output binaries have no external dependencies, install quickly, and typically have an overall lighter footprint than Java, Processing, OpenNI or MATLAB based applications.

No Electric UI branding is forced into the application or installers.

#### **Developer Experience**

Strong developer tooling helps kickstart your MVP. Generate a template project and then iterate in real-time with the hot-reloading sandbox.

Our libraries manage hardware state while component rendering and interaction logic is handled off-thread.

Electric UI's frontend is written with Typescript for strongly typed guarantees, and tight integration with standard IDE's means fewer accidents make it to execution.

Example CI/CD integrations available including end-toend tests and screenshot testing.

# **Target Markets**

- Rapid prototyping for bespoke R&D test-benches.
- · Internal/private development tooling for engineers.
- White-label configuration/visualisation 'app' for consumer products.
- Suitable for appliances, lab equipment, test-rigs, off-grid systems, and prototyping.

# **Support & Services**

- Jumpstart development with online documentation and feature deep-dives.
- · Example implementations and projects available.
- · Turnkey UI development available.

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# **Applications**

### **System Visualisation and Control**

Acting as the companion control software for a rotary delta robot, Electric UI handles dozens of inbound sensor streams and configuration of key parameters.

Integrated real-time visualisation for toolpath planning and trajectory optimisation allows operators to more efficiently configure and supervise the robot's complex operation.



### Rapid R&D prototypes

One-off interfaces developed alongside R&D testbenches provide test technicians with real-time display of sensor data and computed results.

Helps ensure valid data is captured at time of the test, not back at the desk.



## **IOT Sensor Dashboards**

By connecting Electric UI's persistence engine to an IOT broker, the same realtime tooling can be used to browse long-running historical datasets.

User-configurable data transformers allow for interactive event review and statistics summaries,



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