



BROCHURE

Octave Facets Electrical

Leverage your potential in electrical
engineering and design



Facets Electrical

A safe, reliable power distribution system is fundamental. Facets Electrical supports projects of any size, from small to mega projects, to help teams meet the demands of both design and operations with confidence.



Octave Facets Electrical

Octave Facets Instrumentation
 Octave Forte Isometrics
 Smart Engineering Integrity
 Octave Facets P&ID
 Octave Facets P&ID Engineer
 SmartSketch

Project transparency and agility with Octave's digital backbone

Facets Electrical operates within Octave's connected ecosystem powered by the digital backbone that enables real-time data flow across project, operations and maintenance environments.

With secure access from anywhere, teams can collaborate instantly using role-specific data to keep every stakeholder aligned and every decision informed.

User interaction

Today's users expect a modern look and feel. They also need clarity and speed. Facets Electrical delivers both. Its intuitive design reduces complexity, removes unnecessary friction and enables users to work efficiently without navigating overly technical or cluttered environments. The latest version also aligns the user experience across the broader Octave Facets portfolio.

Task-based approach

Focus drives better outcomes. Facets Electrical connects these tasks to keep users aligned to the work at hand while connecting tasks seamlessly across the workflow. The result? Stronger deliverables that support engineering, construction and operations from start to finish.

The Facets solution suite matrix

Solution	Complimentary applications				
Facets P&ID*	Process engineer	Engineer	Engineering integrity	Design validation	Octave Aspect
Facets Electrical			Engineering integrity		Octave Aspect
Facets Instrumentation	External editor	Operational excellence	Engineering integrity		Octave Aspect

*ISO 15926 integrated capability

All can export to Forte 3D (formerly Smart 3D) and SmartPlant Enterprise for owner operators. An interface to PDMS is also available.

Facets Electrical aligns with a task-based environment used across the Octave Facets portfolio. This means that the interface focuses on the task at hand, for example:

- **Create the one-line diagram** – Generate the loads, panels and connections then automatically build diagrams.
- **Perform system analysis** – Exchange data with ETAP through a bi-directional interface for validated designs.
- **Balance loads** – See a quick overview on the loads per bus to meet project requirements.
- **Make connections** – Use the reference data catalog to quickly connect cables, with automatic updates applied.
- **Create schematics** – Create schematics and interface with Facets Instrumentation for I/O interfaces.

Facets Electrical offers a variety of capabilities depending on the type of project and scope of work. The flexible solution fits the project at hand in the most efficient way.

This task-based focus will increase productivity and data quality, with reported productivity gains of more than 40%.

Enhancements

With the integration of Octave's digital backbone, Facets Electrical connects seamlessly to project data, supporting faster design iterations and stronger collaboration.

Deliverables:

- Create complex graphical drawings of any type and content
- Import external CAD and add Facets Electrical components and connections

Manage revisions at a granular level.

Cable management

- Create and edit parallel cables faster
- Support NEC 2011 regulations in tray fill validations
- Cable route within Facets Electrical and with the Forte 3D (formerly Smart 3D) interface

Electrical engineering

- Support multiple electrical loading cases
- Generate load summary reports, for all operational cases

Integration

- Retrieve electrical equipment from Forte 3D
- Send cable schedules for accurate routing and length calculations

Use batch operations for faster creation of electrical components and configurations.

Design reuse

- Bring existing designs created in traditional CAD systems into new Facets Electrical projects
- Leverage best practices to save time, lower risk and lower OPEX costs

Bridging the gaps

- Retrieve electrical equipment from Forte 3D

Data flow is critical to performance. Facets Electrical offers an Application Programming Interface (API) to integrate with third-party and in-house tools to extend flexibility across your environment. Facets Electrical is part of Octave's digital projects, which means it is integrated with other solutions like Facets P&ID (formerly Smart P&ID) for loads, Facets Instrumentation (formerly Smart Instrumentation) for I/Os and Forte 3D for cable routing.

Deployment

Built for complexity, Facets Electrical supports modern project execution from joint ventures to cloud deployment and modular design.

As projects scale, it provides the control needed to manage change, maintain alignment and document decisions throughout the design lifecycle.

Tasks	Labor Hours	
	Without Facets Electrical*	With Facets Electrical*
One-line diagram	16	2
Validation	20	10
Loading balance	5	3
Connections (wiring/cable/routing)	30	2
Schematics (1)	0	5
Deliverables (reports/drawings)	15	5
Total project	86	27

← 67% savings

*Rounded assumptions to indicate potential savings based on market inputs

Value proposition

Drive value across the workflow. Facets Electrical addresses electrical workflows from initial load lists to one-lines through schematics, cable routing, construction, commissioning and operations.

Facets Electrical enables teams to execute projects in a consistent manner, yielding measurable business benefits.

**About
Octave**

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property, and assets– for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency, and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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