

# GRIDXX

## SWITCHGEAR

Hardened Metal Clad Switchgear



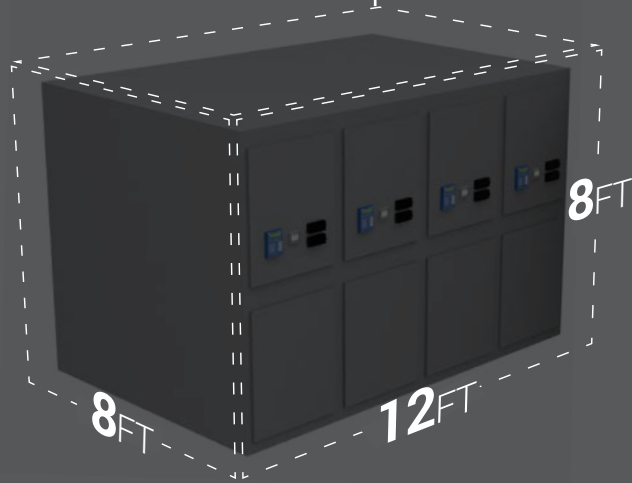
ENGINEER . IMPLEMENT . MAINTAIN .



**GRIDX IS A NEW, COMPACT SWITCHGEAR LINEUP FROM PRIME ENGINEERING CONSISTING OF INDUSTRY LEADING COMPONENTS. THE GRIDX SWITCHGEAR IS A COMPLETE ALL-IN-ONE SOLUTION FOR MEDIUM VOLTAGE APPLICATIONS. OFFERING AN ENVIRONMENTALLY FRIENDLY ALTERNATIVE TO OTHER COMPACT SWITCHGEAR CONTAINING SF6 GAS, THE GRIDX SWITCHGEAR INSTEAD RELIES ON AIR, VACUUM MEDIUMS AND INSULATED BUS FOR ITS DIELECTRIC INSULATION CAPABILITIES.**

TYPICAL 4 BREAKER  
25KV LINEUP  
W/ RELAYING

**768**FT<sup>3</sup>



**> 60%**

**SIZE  
REDUCTION**



**GRIDX**  
SWITCHGEAR

GRIDX  
4 BREAKER LINEUP  
W/ RELAYING

**280**FT<sup>3</sup>

# STANDARD

The Standard model of the GRIDX Switchgear lineup is compact and available in single high or two-high breaker construction offering significant space savings over other standard 25kV ANSI switchgear.

The Standard GRIDX switchgear is available with line and load voltage transformers as well as line and load current transformers for each breaker cell compartment.

## GRIDX Switchgear features the following range of benefits:

- **MODULAR:** Each cell is constructed from the same base frame allowing every configuration of cell to be easily fitted side-by-side. The voltage transformers drawers are interchangeable, thus on line and load VT compartments the top unit can be interchanged with the middle unit without any modifications needed.
- **FLEXIBLE:** Cable entry can be top or bottom and the switchgear is designed to be extendible on either side of the lineup without modifications to the existing switchgear.
- **HEAVY DUTY:** Each switchgear cell is constructed of heavy duty 12 gauge steel and is designed to be robust, compact and operated with minimal maintenance.
- **SAFE:** Built-in features including compartment isolation and insulated bus sections provide safety above and beyond the industry standard minimum requirements. In addition, remote racking, remote monitoring and Arc Flash mitigation are all options that can accompany the switchgear.

## KEY FEATURES

- A 25kV cell that is 32" wide thus providing an overall cell width typical of many 15kV ANSI form factors.
- PT drawers can be fully extended outside the cell to allow for ease of maintenance and testing
- The PT drawers utilize gravity driven shutters, eliminating adjustment and maintenance of the spring mechanisms found on some other PT drawers.
- Prime Engineering has in-house lab testing facilities for corona extinction, and dielectric strength testing providing reliable and proven standards and custom designs.
- Prime Engineering is vendor agnostic and able to integrate owner/consultant specified equipment
- Prime Engineering is a full service Electrical Engineering firm and can offer complete in-house custom protection engineering design as well as switchgear supply.
- Prime Engineering has a full fleet of field services technicians and test equipment and is able to provide onsite testing, commissioning, maintenance and 24hr emergency service.
- Complete Factory Acceptance Testing of equipment prior to shipment

COMPACT / EFFICIENT / ECONOMICAL

# UPGRADES



## OPTIC

The OPTIC model of the GRIDX Switchgear comes in the same compact form factor and base frame as the Standard switchgear but is available with electronic current and voltage sensors adhering to IEC 60044-8 and IEC 60044-7 respectively.

The sensors have multiple benefits including a very high saturation level (linear response), small form factor, light weight and high accuracy.

When used in combination with the IEC 61850 protocol the Optic switchgear provides a cutting edge solution for Smart Grid implementation. The OPTIC solution reduces the amount of secondary control wiring resulting in significant savings of manpower and hardware as well as physical copper cable utilized.



## POWER

The PoWER (Point on Wave Energy Reducing) model of the GRIDX Switchgear provides the ability to do Point on Wave switching of transformer loads in a Metalclad switchgear arrangement. The Point on Wave switching minimizes transformer inrush current allowing transformer energization with minimal effects to the source electrical system. This unique setup is ideal for energizing large transformers from weak networks and with our patented Arc Flash reducing process it further allows the reduction of downstream energy levels by allowing tighter protection settings. Reduced energy levels result in lower Arc Flash levels at little or no added cost.

Typical transformer inrush current can be reduced by 50-70% using a single breaker design.

Alternatively inrush can be almost completely eliminated using a combination of two breakers in a two-high switchgear configuration.

*Please contact us for more details.*

# GRIDX

## TECHNICAL SPECS

**AMPACITY:**

600-1200A\*

**INTERRUPTING RATING:**

16-25kA\*

**VOLTAGE:**

4.16kV-27.6kV

**FINISH:**

Powder Coat

**DIMENSION:**

32"W x 85"D x 98"H (per cell)

**WEIGHT:**

1400kg (typical)

**STANDARDS:**

Built to CSA C22.2 No.31

**TEMPERATURE:**

-25°C - 40°C\*

*\*Additional ratings  
and options available  
upon request*



## OPTIONAL ACCESSORIES

- *LIVE LINE INDICATORS*
- *INTERLOCKS*
- *INFRARED (IR) WINDOWS*
- *REMOTE RACKING*
- *GROUNDING DEVICES*
- *COMMUNICATION VIA IEC 61850, DNP3 OR MODBUS.*

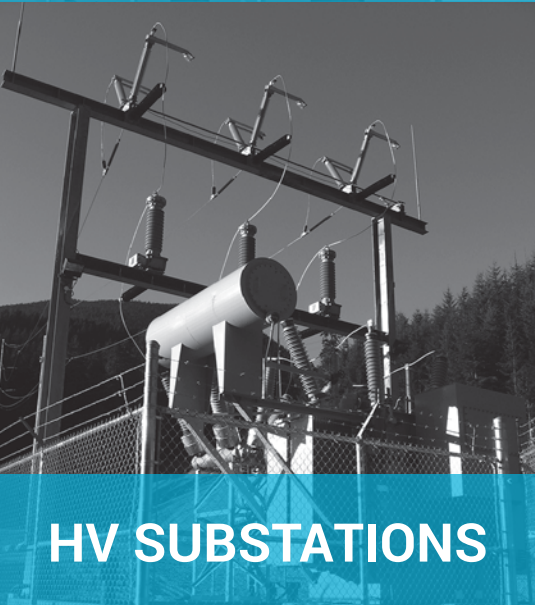


**METAL CLAD SWITCHGEAR**

**CONTROL PANELS**



**E-HOUSES**



**HV SUBSTATIONS**

**OUTDOOR SWITCHGEAR**



**FIELD SERVICE & COMMISSIONING**



**UNIT SUBSTATIONS**

**ARC RESISTANT SWITCHGEAR**



**LV SWITCHGEAR & RETROFITS**



Prime Engineering Ltd is a full service electrical engineering firm specialising in medium voltage equipment design and manufacturing, commissioning and maintenance. We offer unit substations and switchgear solutions to a wide array of industries and markets including: Institutional, government, commercial and industrial as well as water, waste water and renewable energy.

# GRIDX

## COMPACT & TECHNOLOGICALLY ADVANCED SWITCHGEAR



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