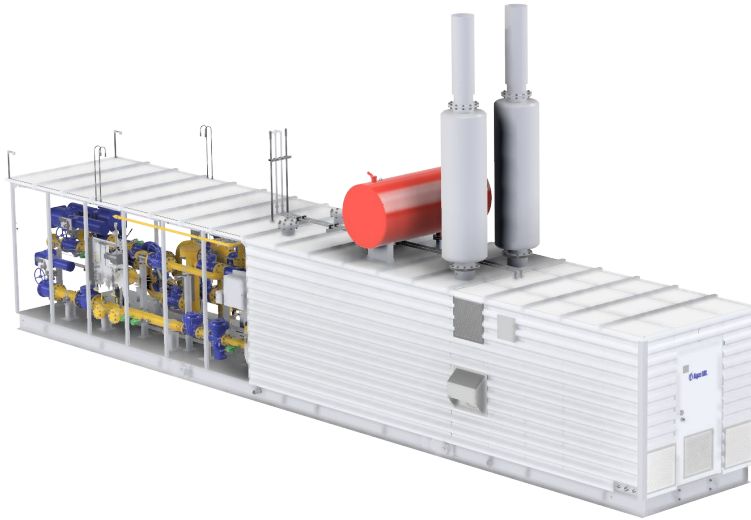


TRUXX™

MODULAR GAS LETDOWN & CONDITIONING SYSTEM

Engineered for Behind-the-Meter Power Generation



PRODUCT OVERVIEW

The TRUXX™ is a fully integrated, modular gas conditioning and pressure letdown system designed to deliver **precisely controlled natural gas** to power generation assets including gas engines and turbines.

Purpose-built for **data centers, microgrids, and distributed energy systems**, TRUXX ensures optimal gas pressure, temperature, and quality under dynamic load conditions—critical for high-availability environments such as AI-driven data centers.

Key Applications

- Behind-the-meter (BTM) power
- Gas turbine and reciprocating engine fuel conditioning
- Microgrid and distributed generation systems
- Industrial energy systems

PRIMARY FUNCTIONS

- High-pressure gas pressure reduction (letdown)
- Gas heating and thermal management
- Temperature stabilization to prevent hydrate formation
- Delivery of clean, conditioned fuel gas to generators
- Support for variable flow and rapid load changes



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MODULAR GAS LETDOWN & CONDITIONING SYSTEM

CORE FEATURES

Integrated Pressure Letdown

- Reduces gas from pipeline / GDPM supply (up to ~1,440 psig)
- Delivers stable downstream pressure (typically 30–100 psig)
- Multi-stage regulation for precise control

Advanced Thermal Management

- Dual 4 MMBtu/hr direct-fired line heaters (typical)
- Maintains gas temperature above hydrate formation limits
- Optional thermal integration:
 - Waste heat recovery (gensets/turbines)
 - Hot water or glycol systems

High Turndown Performance

- Designed for wide operating ranges (up to 100% turndown)
- Maintains stable output under:
 - Partial load
 - Rapid ramp events
- Ideal for AI-driven data center load variability

Modular, Standardized Design

- 8.5' TRUXX platform optimized for transport and deployment
- Repeatable “building block” architecture:
 - Covers ~95% of applications without customization
 - Enables rapid scaling via parallel units

Integrated Controls & Automation

- PLC-based control system with:
 - Pressure control loops
 - Temperature regulation
 - Heater management
- Interfaces with:
 - GDPM (gas management system)
 - Power plant controls
 - Microgrid systems

AWARE™ Digital Platform)

- Real-time system monitoring
- Predictive maintenance analytics
- Fleet-level performance optimization
- Remote diagnostics and alerting

Optional Features & Add Ons

- Gas odorization system
- Flow measurement integration
- Custody transfer
- Gas quality monitoring
- Distribution Module

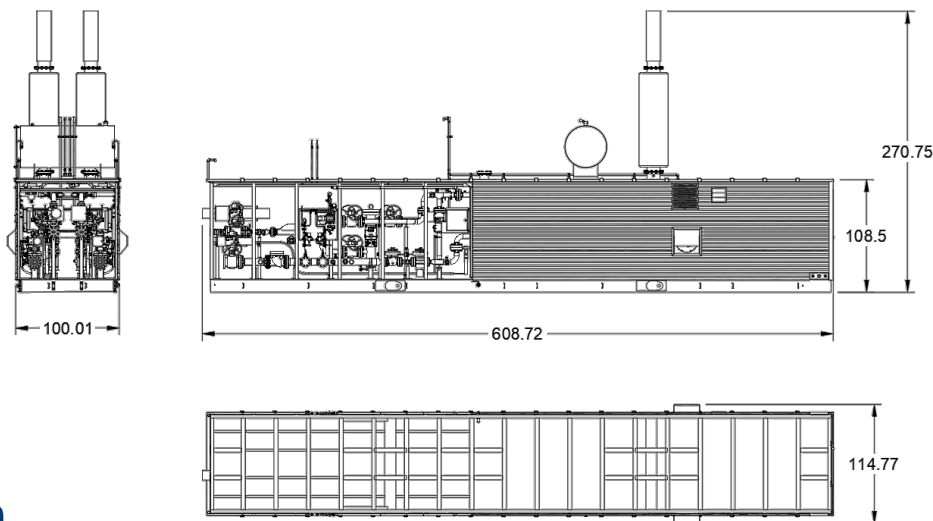
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TECHNICAL SPECIFICATIONS

Parameter	Specification
Inlet Pressure	Up to 1,440 psig
Outlet Pressure	30 – 100 psig (configurable)
Flow Capacity	Up to ~70 MMSCFD per unit
Heating Capacity	2 × 4 MMBtu/hr
Turndown	Up to 100%
Temperature Control	±2°F
Fuel Type	Natural gas
Power Supply	480V / 3-phase
Design Codes	ASME, ANSI, NFPA compliant

DIMENSIONS & WEIGHT



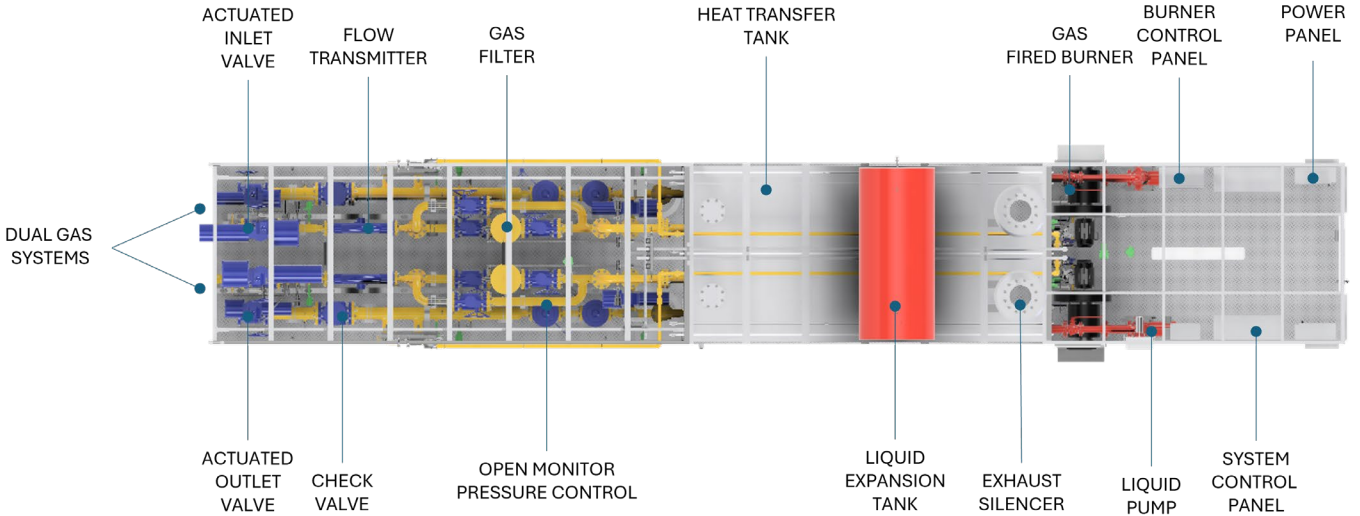
Shipping Dimensions

Length: 51.0 ft
Width: 8.5 ft
Height: 9.5 ft
Weight: 65,000 lbs.

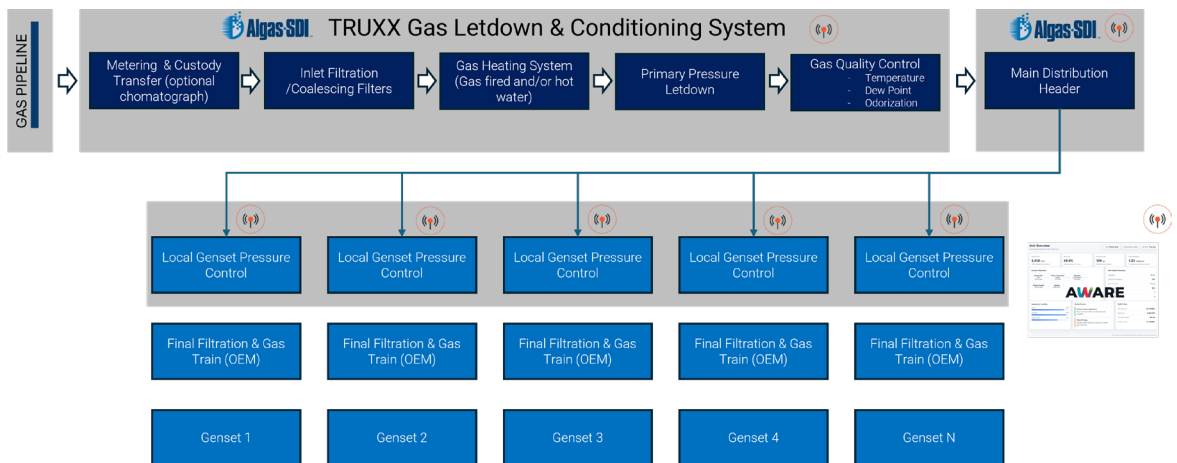
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ANATOMY



SYSTEM ARCHITECTURE



TRUXX™

MODULAR GAS LETDOWN & CONDITIONING SYSTEM

BENEFITS

Fuel Stability

- Maintains consistent gas conditions under:
 - Rapid load swings
 - Partial load operation
- Prevents generator trips and derates

Rapid Deployment

- Pre-engineered modular design reduces:
 - Engineering time
 - Field construction
 - Commissioning duration

Scalability

- Easily expandable for: 100 MW → multi-GW campuses
- Parallel unit configuration supports phased growth

Efficiency Optimization

- Integrated thermal management reduces:
 - Fuel losses
 - Heater inefficiencies
- Enables waste heat utilization

Standardization

- Repeatable platform simplifies:
 - Procurement
 - Permitting
 - Operations & maintenance

OPTIONS

- N+1, N+2, 2N redundant configurations
- Waste heat integration packages
- Emissions-optimized heater systems
- Cold weather and heat tracing packages
- Enclosed or skid-mounted configurations
- Advanced gas analytics and monitoring
- Heat recovery from site gensets for use by thermal heater

COMPETITIVE DIFFERENTIATORS

- Purpose-built for BTM power (not adapted utility equipment)
- High turndown for AI-driven load variability
- Standardized modular design for rapid deployment
- Integrated controls + digital monitoring
- Re-deployable for bridge-to-grid applications

CONTACT

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