



## HD Hydrogen Station

**Modular, expandable refueling station architecture with independently configureable compression, storage and dispensing capacities.**

- Fault-tolerant reliability through extensive failover interconnections between all subsystems.
- Howden/Chart piston compressor designed specifically for hydrogen refueling under sporadic duty cycles.
- Pre-cooled fills using a proprietary fueling-specific hydrogen cooling system.
- Fully integrated with a single unified control system.
- Available retail point of sale, fleet card support and remote station analytics.
- Hyfluence equipment is engineered to level of functional safety and standards compliance unmatched in the industry.

### FUEL DISPENSER SPECIFICATIONS

Fueling positions	Single or dual
Hose orientation	Lane oriented or island oriented
Filling pressure	H35 (350 bar) and/or H70 (700 bar) Multi-pressure configurations available
Flow capacity	Standard flow: 3.6 kg/min High flow: 5.4 kg/min H35 High flow: 7.2 kg/min
Fueling protocols	SAE J2601-1, SAE J2601-5 (MCF-HF-G)
Vehicle communications	SAE J2799. Can operate without vehicle communications
Metering	Coriolis mass flow metering
User interface	7" color touch screen
Payments	Tap, chip and swipe functionality Fleet card option available

## COMPRESSION AND CAPACITY SPECIFICATIONS

Daily capacity (per compression module)	Up to 1600 kg/day
Max. capacity (per compression module)	70 kg/hour
Inlet pressure range	25 to 500 bar
Outlet pressure	875 bar
Compressor type	Hydraulically-driven piston, specifically developed for refueling duty

## GENERAL SYSTEM SPECIFICATIONS

Pre-cooling	In-house developed for refueling duty, integrated with dispenser
Storage	Optimized through dynamic simulation of customer requirements
Monitoring and management	Full data logging and reporting, with optional web-based system dashboard; remote management via secure VPN; automated event reporting via email.
Operating temperature	-15°C to +40°C, cold weather option available
Humidity	20 to 95% Rh (non-condensing)
Dimensions, Dispenser	0.9 x 1.0 x 2.7 meters (L x W x H)
Dimensions, Compression Module	6.0 x 2.4 x 2.9 meters (L x W x H)
Dimensions, E-House (1 per Compression Mod.)	3.6 x 2.4 x 2.9 meters (L x W x H)
Dimensions, Refrigeration (1 per Dispenser)	5.0 x 1.6 x 4.8 meters (L x W x H)
Certifications	Applicable North American standards including CSA HGV 4.1, 4.8, 4.9, NFPA 2, IEC 61508/61511, ADA, BNQ1784-000