

Product Data Specification Sheet



The below information is compiled to provide specific data and information regarding the MAHRS PRO & MAHRS LTE models. The information is intended for general purpose to support project planning. Application specific requirements can cause some information below to vary during operation. Please consult with the Celly team to ensure your the below detail complies with your specific needs. Equipment



MAHRS Model	LTE	LTE+	PRO
Performance			
Dispensing Pressure	350 Bar	350 Bar	350 or 700 Bar
Dispensing Flow Rates	Avg: <1 kg/min*	Max: 5.4 kgs/min @ T20 Avg: > 2 kgs/min*	Max: 3.6kgs/min @ T40, ~5.4kgs/min @T20 Avg: >2kgs/min*
Dispensing style	Modular industrial dispenser machine or remote mounting	Integrated industrial dispenser	Commercial dispenser w/POS option, machine or remote island mounting
User Interface	Industrial 7" HMI, Modbus Protocol, vehicle to dispenser communication interface (SAE 2799 or similar).	Angle 350 Bar HF (standard flow) Hydrogen dispenser - Single Sided, Mobile Fueler Configuration, vehicle to dispenser communication interface (SAE 2799 or similar).	Bennett Systems Interface with 7" widescreen interactive display, Modbus Station communication, Vehicle to Dispenser communication interface (SAE J2799 or similar), POS optional
Fueling Method/Protocol	J2601-2, J2601-5	J2601-2, J2601-5	J2601-1, J2601-2, J2601-5
Nozzle	Single H35 WEH Nozzle, TK16 or TK 16 high flow w/IR	Single H35 WEH Nozzle, TK16 HF with IR comms	Single or dual H70 &/or H35 WEH Nozzle(s), TK20HF or TK16HF w/IR
Flow Measurement	Coriolis meter	Coriolis meter	Coriolis meter
Chiller Capabilities	Not applicable, temperature monitored via logic	- 10 Ton 120,000 BTU/HR - Water glycol based chilling for cooling of compression jackets and hydrogen for temp compliance into storage vessels - optional hydrogen chiller for T0, T10, T20 J2601-2 compliant protocol fills	Dual chiller system with chiller for compression and chiller for dispensing: - 20 Ton 240,000 BTU/HR - Water glycol based chilling for cooling of compression jackets and hydrogen for temp compliance into storage vessels - CO2 based chiller for T40, T30 or T20 compliant fueling protocols
Compression Type	Pneumatic diaphragm no lube consolidation hydrogen booster	Hydraulic no lube 2 stage H type hydrogen consolidation booster	3 or 4 Hydraulic no lube H type single stage hydrogen boosters for consolidation and direct compression vehicle filling
Compression capability	100kg/day* @520 bar Variable based on inlet pressure	400kg/day* @520 bar, booster capable to 700 bar Variable based on inlet pressure	1400 kg/day* @520 bar & 700 bar Compression capability varies based on equipment configuration, application use case, inlet pressure and fueling demand
Celly Smart Storage	Optional Celly Smart Storage with simultaneous consolidation and cascade dispensing capabilities	Standard Celly Smart Storage with simultaneous consolidation and cascade dispensing capabilities	Standard Celly Smart Storage with simultaneous consolidation and cascade dispensing capabilities
Warranty	1 year from commissioning or 18 months from shipment - time period that elapses first - Optional Extended warranty and maintenance programs available		
Weight & Dimensions**			
Length	8'-4"	17' 10.5"	40'
Width	6'-10"	9'	8'-8"
Height	7'-6 1/4" (shipped), 12' 6" (approximate w/Vent)	8' 3" (shipped), 12' 4" (approximate w/Vent)	9'-0 1/4" (shipped), 12' 6" (approximate w/Vent)
Weight	~9,500 lbs	~15,000lbs	~40,000 lbs
Power/Electrical			
Electrical Supply	480v-3ph-60hz	480v-3ph-60hz	480v-3ph-60hz
Power Consumption	Startup: 100kw (120 amps) Operating: 70kw (85 amps)	Startup: 200kw Operating: 150kw	Startup: 283kw (340 amps) Operating: 218kw (262 amps)
Safety			
Safety	Emergency Shutdown System (ESD) Circuits, Infrared Flame Detection Circuits, Gas Detection System		
Noise emissions			
Hazardous Equipment rating	NFPA UL Class 1, Division 2, Group B where applicable		
Process Connections			
H2 process tubing	9/16" Medium Pressure Cone and Thread, 316SS		
H2 Venting	3/8" Medium Pressure Cone and Thread, 316SS		
External Storage (Supply and buffer)	9/16" Medium Pressure Cone and Thread, 316SS		
Pneumatic	1-1/4" to 2" THD	n/a	
Hydraulic	n/a	#20 SAE & pressure rated hose	
Chiller	n/a	#16 SAE (1-5/16" - 12) & 9/16" Medium Pressure Cone and Thread, 316SS on CO2 chiller	#16 SAE (1-5/16" - 12) for water glycol & 9/16" Medium Pressure Cone and Thread, 316SS on CO2 chiller

**Actual performance, dimensions and power consumption may vary based on component selection (i.e. compressor configuration, chiller selection, dispenser model, etc.)

*Actual performance including fill rates & compression throughput vary based on compressor setup, chilling capacity, inlet pressures, vehicle SOC, storage configurations and ambient temperatures

Notes:

- (i) Actual performance may vary based on station demand, storage capacity and ambient temperature. Fueling performance assumptions based on average compressor inlet pressures, 520 bar buffer storage at localized ambient temperatures between -20°F to +80°F.
- (ii) Assumes adherence to regular maintenance and installation
- (iii) Vents shall be minimum 10' above grade or 5' above impinging structures within 15' radius of discharge point or as directed by 3rd party safety review.
- (iv) Available listings include CSA HGV 4 series, SAE J2600, ISO 19880-1, ISO 22734, IEC 60204-1 and assessment to IEC 60079 Series of documents. Assumes installation in accordance with NFPA-2 or applicable local regulations.