



TITAN™ HMXT SERIES

On-site Hydrogen Generation System

Teledyne Energy Systems builds decades of engineering excellence into every hydrogen generator system, ensuring the most reliable and durable on-site hydrogen solutions available.

TITAN HMXT Advantages

Ultra Pure Gas

Ultra pure (99.9998%) gas generation with continuous purity monitoring increases equipment life, saving considerable maintenance and replacement costs.

Proven Reliability

Durable stainless steel process components maximize system life. Demonstrated life span of 25+ years.

Comprehensive Installation

Every TITAN hydrogen generator system is fully assembled and skid-mounted for trouble-free shipping and simple installation.

Fully Tested

Each unit is thoroughly factory-tested to meet Teledyne's exacting standards and exceed industry codes.

On Demand Gas Delivery

- Pressure up to 150 psig (10 barg)
- Maximum flow delivery ranges of 50, 100 and 200 SLM
- Higher flow delivery ranges available to meet your specific hydrogen requirements

Custom Engineered Design

Custom-engineered hydrogen generating solutions available for optimum integration with existing plant infrastructure.



Safe, Unattended Operation

- Fully automatic operation with on-board diagnostics
- Minimal on-board gases and no sparking components
- Uninterruptible Power Supply (UPS) ensures system control in the event of power outage
- Remote monitoring and operation option
- O₂ byproduct is safely vented outside your facility or can be optionally configured for use in your process

TELEDYNE TITAN™ HMXT SERIES

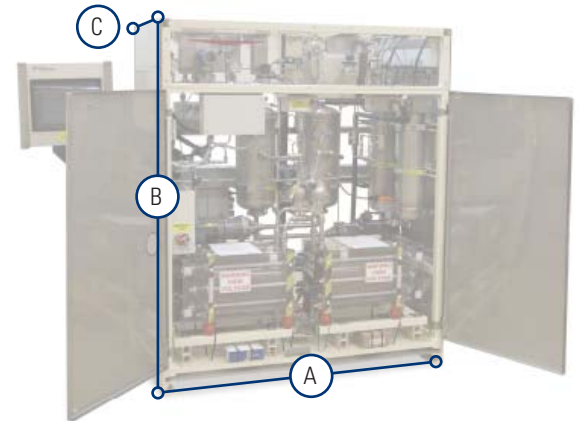
MODEL		HMXT-50	HMXT-100	HMXT-200
Hydrogen Gas Production				
Max. Flow Rate	SLM	50	100	200
	Nm ³ /hr	2.8	5.6	11.2
	scfh	106	212	424
	kg/day	6.09	12.02	24
Oxygen Gas Production				
Max. Flow Rate	SLM	25	50	100
	Nm ³ /hr	1.4	2.8	5.6
	scfh	53	106	212
Feed Water Consumption				
	l/hr	2.55	5.11	10.2
	g/hr	0.7	1.3	2.7
Power Supply				
	Voltage	Factory Configured, 380-480 VAC, 3 Phase		
	Frequency	50 or 60 Hz		
H₂ Purity			99.9998%*	
O₂ Purity			99.999%**	

*Subject to ambient and condenser water temperatures **With use of optional HMXT O2 purifier

SPECIFICATIONS

H₂ Delivery Pressure		
	kg/cm ² gauge	10.3
	psig	150
O₂ Delivery Pressure		
	kg/cm ² gauge	9.6
	psig	140
Cooling Water		
Max. Inlet Temp.	°C	40
	°F	104
Max. Flow	lpm	40
	gpm	11
Pressure Drop	kg/cm ²	1.75
Main Heat Load	watts/slpm H ₂	127.5
Condenser Cooling Water ***		
Max. Temperature	°C	up to 10
Max. Allowable Pressure	kg/cm ² gauge	7
Required Flow	lpm	4
	gpm	1.1
Pressure Drop	kg/cm ² gauge	0.2
Condenser Heat Load	kW	1.5 to 2.25
Purge Gas		
		N2 or other inert gas
	kg/cm ² gauge	5.3 to 17.5
	psig	75 to 250
Feed Water Specification		
		ASTM D1193-99, Type IV
Min. Resistivity	MegOhm-cm	0.2
Min. Supply Pressure	kg/cm ² gauge	.035
	psig	0.5

***To achieve 99.9998% H₂ purity & 99.9998% O₂ purity



A: 149.8 cm 58.98 in	Approximate Weight:
B: 177.8 cm 70 in	50 SLM = 583 kg / 1285 lbs
C: 75.18 cm 29.6 in	100 SLM = 606 kg / 1335 lbs
	200 SLM = 675 kg / 1485 lbs

Power Supply Required: L 86.0 cm / 33.9 in x W 76.5 cm / 30.1 in x H 184.8 cm / 72.8 in Mass 727 kgs / 1600 lbs.
 Normal Conditions: 0°C and 1 kg/cm² abs (68°F and 14.7 psia)
 Standard Conditions: 20°C and 1 atm
 System can be installed indoors or outdoors in a protected environment between 5°C and 40°C
 Specifications are subject to change



TELEDYNE
ENERGY SYSTEMS, INC.
 A Teledyne Technologies Company

10707 Gilroy Rd
 Hunt Valley, MD 21031-1311, U.S.A.
 +1.410.771.8600 FAX: +1.410.771.8618
 www.teledynees.com
 Email: Energy.Systems@TeledyneES.com