



# HT-100

## Product Data Sheet and System Specification

### Dimensions

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<i>Base</i>	48 in. x 96 in. (1.2 m x 2.4 m)
<i>Height</i>	102 in. (3.1 m)

### Weight

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<i>Empty</i>	1750 lbs (800 kg)
<i>Maximum capacity (containing Jet A Fuel)</i>	3150 lbs (1430 kg)

### Capacity

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<i>Maximum storage capacity</i>	200 gal (757 l)
<i>Maximum line capacity (without blow-down valve)</i>	60,000 gal (227,400 l)

### Detectable Leak Rate

(Probability of detection of 95%  
with a probability of false alarm  
of 5%)

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<i>For line capacities less than 12,000 US gal (47,000 l)</i>	0.5 gal/h (2 l/h)
<i>For line capacities greater than 12,000 US gal (47,000 l)</i>	0.0021% of line volume per hour (0.021 l/h/m <sup>3</sup> )

### Power

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<i>Skid</i>	Single-phase 120/208 VAC 60 Hz (50 Hz optional)
<i>PLC (controller)</i>	Single-phase 120 VAC 50/60 Hz

### Temperature

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<i>Operating</i>	-20° to 100° F (-29° to 38° C)
<i>Non-operating</i>	-50° to 200° F (-45° to 93° C)

### Pressure

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<i>Maximum test pressure</i>	200 psi
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### Controller

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<i>Allen-Bradley PLC-5 Communications</i>	Vista control/processing software Serial (RS 232)
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## Optional Features

The options listed below allow easy integration of the HT-100 into many facilities. They also permit the use of the HT-100 on a wide range of piping. The addition of a “blow-down” valve and/or increased-capacity tanks can extend the maximum line size testable with the HT-100. Maximum testable line size can be extended even further with special-order features.

Various power options are available for both the skid and the PLC, so that in most cases existing power at the facility can be used.

For networking multiple HT-100 systems, or integrating the HT-100 into an existing SCADA system, there are multiple communication protocols and wiring types available.

For stand-alone applications, Vista Research can provide a workstation with a complete user interface to the HT-100, including data recording and printing capability.

Code	Category	Option	Comments
<b>Capacity</b>			
			Maximum line capacity:
BD		<i>Blow-down valve</i>	200,000 gal
C30		<i>30-in. Tanks</i>	300,000 gal (when combined with blowdown valve)
C36		<i>36-in. Tanks*</i>	450,000 gal (when combined with blowdown valve)
C42		<i>42-in. Tanks*</i>	600,000 gal (when combined with blowdown valve)
		* 36- and 42-in. tanks are mounted on a larger skid base than the one shown	
<b>Power</b>			
P2		<i>Skid power</i>	Three-phase 230/480 VAC 60 Hz (50 Hz skid power available)
P3		<i>PLC power</i>	Single-phase 208 VAC 50/60 Hz
<b>Extended Temperature</b>			
XT		<i>Operating</i>	-40° to 150° F (-40° to 80° C)
		<i>Non-Operating</i>	-50° to 200° F (-45° to 93° C)
<b>Controller</b>			
DH		<i>Allen-Bradley PLC-5</i>	Communication options: DH+, fiber optic
GE		<i>GE Fanuc 90-30</i>	Communication options: RS232, GENius, fiber optic
<b>User Interface</b>			
SM		<i>System monitor</i>	<ul style="list-style-type: none"> <li>▪ Pentium-based PC</li> <li>▪ Windows NT</li> <li>▪ Wonderware</li> <li>▪ Vista GUI software</li> </ul>
<b>Alternate Configurations</b>			
		<i>Valve Vault Unit</i>	The HT-100 system is also available in a configuration suitable for installation in a valve vault. This version of the HT-100 is specially designed for the harsh environment of a valve vault.
		<i>Mobile Unit</i>	For applications where a mobile testing unit is desired, Vista Research offers a truck-mounted HT-100 system. This version of the HT-100 is completely self-contained, including on-board power, computing, and printing capability, for immediate results even in remote areas.
<b>Multiple Line Access</b>			
M2-5		<i>Electronic Manifold</i>	With the electronic manifold, the HT-100 can be connected to up to five pipelines. Lines can be tested singly or in combination.



