





#### The best choice for high measurement accuracy and reliability

INFICON offers the world's leading technology in the field of measuring and sensor technology as well as process control for sophisticated vacuum processes in highly specialized industries. INFICON products for gas leak detection are used, in particular, in the refrigeration and air conditioning sectors, in semiconductor manufacturing and in automobile production. With INFICON, you have a competent partner at your side who is familiar with the challenges of your industry and, working together with you, finds the best solution to meet your requirements. INFICON specialists at numerous branches worldwide provide top service and the broadest possible support. State-of-the-art production facilities are located in the USA, Europe and Asia.

#### **T-GUARD2**

SPECIFICATIONS	
Minimum detectable helium leak rate	1 x 10 <sup>-6</sup> mbar l/s
Measurement range	5 decades
Test chamber pressure	1 atm
Maximum carrier gas flow	1,000,000 sccm
Probe gas flow Fine / Gross	180 sccm / 90 sccm
Time constant of the leak rate signal	< 1 s
Helium sensor	Wise Technology™
Run up time	< 3 min
Hose connectors	6 mm
Control inputs	6 x PLC compatible (max. 35 V)
Status / Trigger outputs	8 x relay contacts (max. 25 V AC / 60 V DC / 1 A)
Chart recorder output lin/log	2 x 0-10 V, programmable
Power supply demand / power consumption	24 V DC / 100 W
Type of protection	IP20
Dimensions (L x W x H)	272 x 130 x 272 mm; 10,7" x 5,1" x 10,7"
Weight	6,8 kg / 15 lbs
Noise level dB (A)	< 56
Recommended fore pump	two-stage diaphragm

ORDERING INFORMATION	
PRODUCT	CATNO
T-Guard2 Leak Detection Sensor	540-200
T-Guard2 Leak Detection Sensor with Profibus	540-201
OPTIONS, ACCESSORIES	
Display unit for table-top use	551-100
Display unit for rack installation	551-101
Connecting cable for display unit, 5 m	551-102
Connecting cable for display unit, 1 m	551-103
Set of connecting plugs	551-110
I-Stick	200 001 997



Leak testing prevents large quantities of environmentally harmful substances from being released into the atmosphere.



Due to our continuing program of product improvements, specifications are subject to change without notice.





# T-Guard2 – A Class of its own in Accumulation

## **ALMOST MAINTENANCE-FREE**

**T-Guard2 Leak Detection Sensor** closes the gap between costly hard vacuum helium leak detection and low sensitivity leak testing methods like water bath and pressure decay. There is no faster and more cost-effective way of repeatable leak testing in the measurement range of T-Guard2.

The T-Guard2 Leak Detection Sensor is based on the maintenance-free INFICON Wise Technology™, proven successfully used under harsh conditions for over a decade. There is no need for expensive vacuum chambers and the costly, maintenance-intensive turbomolecular pumps.

#### **UP TO 100 TIMES MORE PRECISE**

With T-Guard2, INFICON offers a unique leak detector which can be simply

**COST EFFECTIVE, RELIABLE AND** integrated into a leak test system and provides unmatched accuracy. With the improved Wise Technology sensor, T-Guard2 determines leaks down to E-6 mbarl/s and finds smaller leaks than many traditional leak testing methods can.



#### PRECISION MEETS RELIABILITY

T-Guard2 does not require vacuum or turbomolecular pump. T-Guard2 sets new standards in precise productivity and proven reliability.

#### **ADVANTAGES AT A GLANCE**

#### Low operating cost

The INFICON Wise Technology helium sensor does not need a vacuum, turbo-pump, or maintenance. This lowers your operating costs and assures high uptimes

### No limitation of product properties Even warm or humid objects, and

those can not be well operated under Flexible control vacuum can be leak tested

#### Simple and low cost chamber

T-Guard2 works at atmospheric pressure, therefore there is no need for vacuum chambers and pumps

#### Find all leaks reliably

With INFICON Wise Technology leaks down to E-6 mbarl/s can be detected reliably

#### Easy to use

The intelligent software and optional display units supply easy operation through an intuitive menu structure.

INFICON T-Guard2 allows a wide range of control options. You can choose between PLC, PC or optional display and Profibus.

### **INTERFACES**

Control with PLC and PC interfaces









#### **DISPLAY UNIT**

Optional display units supply easy operation through an intuitive menu structure.



#### PROFIBUS CAPABLE

State of the art communication through Profibus optional.

#### THE ACCUMULATION METHOD

In carrier gas mode, a suitably sized stream of air passes the test object. This stream transports the helium from any given leak to T-Guard2 Leak Detection Sensor. It measures the helium concentration in the gas stream and reports the actual leak rate to the user.

