

# CTI CRYOGENICS® ON-BOARD® /S-2000V COMPRESSOR

edwardsvacuum.com

The most energy-efficient compressor in the industry. The On-Board® /S-2000V Compressor meets process engineers' demands for improved performance, greater energy efficiency, lower energy costs and design flexibility. Not only does it support up to 10 cryopumps in half the footprint of other compressors, the /S-2000V provides the highest energy efficiency in the industry.

The /S-2000V lowers cost of ownership with greater efficiency, higher cryopump capacity and optimal helium management.

Edwards provides the answer to industry demands for greater efficiency and sustainable operations<sup>1</sup>. The /S-2000V reduces energy consumption by more than 20% and the thermal load on facility cooling water by 40%.

Our compressor features design refinements resulting in adaptable helium output and fault-tolerant operation. Variable speed operation enables dramatic power savings while the compressor runs at more efficient and higher pressures to optimise the helium output.

The /S-2000V supports new and existing On-Board® /S Cryopump applications. It leverages proven On-Board® /S technology: intelligent system controls, cryopump solution integration, robust electronics and software. Like the rest of our range, it enables multiple pump configurations with the most efficient and cost-effective helium management solution.

<sup>1</sup>The /S-2000V aligns with the energy reduction objectives associated with SEMI Standard S23 (Guide for Conservation of Energy, Utilities and Materials Used by Semiconductor Manufacturing Equipment), and is compliant with the RoHS (Restriction of Hazardous Substances) directive.



## Features and benefits

### /S-2000V Offers Lower Cost of Ownership:

- Highest energy efficiency – variable speed increases cooling capacity and reduces energy costs by at least 20%
- Single compressor solution – one /S-2000V will support up to 10 cryopumps
- Smaller footprint – stacked design halves compressor footprint in your facility

- Lower thermal load – cooling water load is reduced by approximately 40%
- Fault-tolerant operation – designed to minimise operational downtime and send alerts

### On-Board® /S Benefits

- Proven reliability and operational life

- Increased tool availability for higher productivity
- Intelligent cryopumping solution to maximise pump efficiency
- Optimal helium management and power savings
- Global rapid response teams

## Compressor Specifications

### Dimensions

518 mm w x 686 mm d x 1481 mm h  
(20.4" w x 27.0" d x 58.3" h)

### Weight

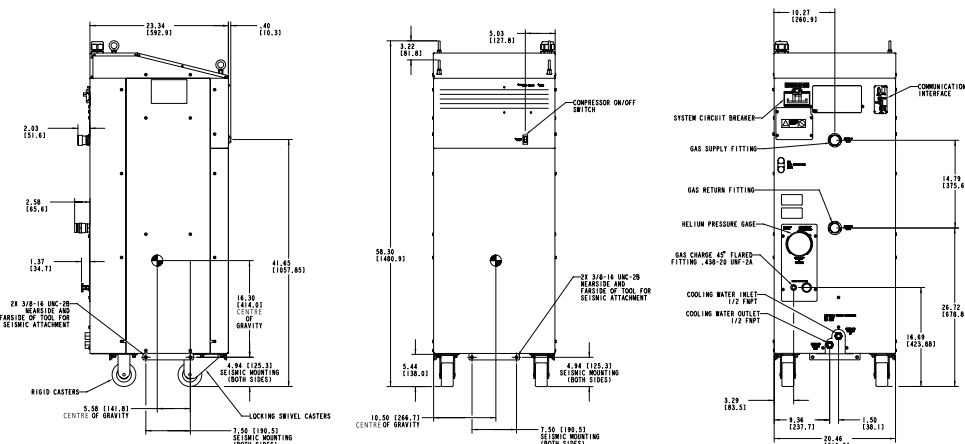
Low-Voltage Model 250 kg (550 lbs)  
High-Voltage Model 261 kg (575 lbs)

### Operating Voltage (3-phase, 50 Hz or 60 Hz)

Low-Voltage Model 180-253 VAC  
High-Voltage Model 342-528 VAC

Input power 13.5 KW

Cooling water 3.0 to 4.0 GPM

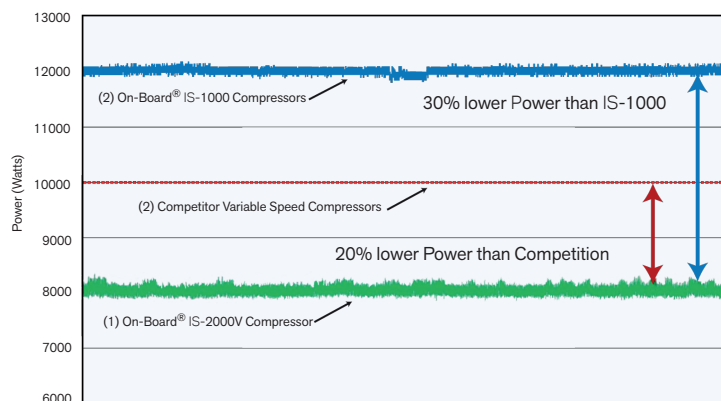


### On-Board® IS-2000V Compressor

Cryopumps consume up to 22% of a tool's energy during process and up to 50% when idle. The IS-2000V substantially reduces these values, lowering the cost of ownership over the life of your tool.

## 20% Power Savings Over Competition

Demonstrated Energy Reduction by Large End-user.  
On-Board® IS-2000V Compressor Power Consumption

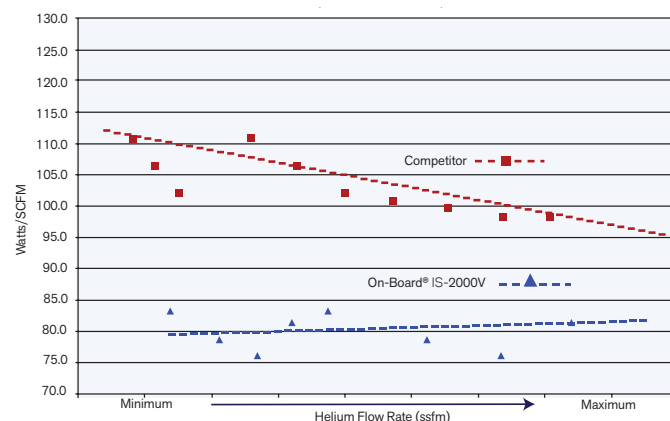


The IS-2000V offers 30% lower power consumption than the IS-1000 and 20% over competing compressors.

Edwards continually updates its products to match the evolving needs of the semiconductor industry and any specifications given here are subject to change without notice.

## Variable Speed Compressor Increases Efficiency

On-Board® IS-2000V vs (2) Competitor Compressors  
Watts/SCFM (480 VAC 60 Hz)



## GLOBAL CONTACTS

© Edwards Limited 2018. All rights reserved Edwards and the Edwards logo are trademarks of Edwards Limited.

Whilst we make every effort to ensure that we accurately describe our products and services, we give no guarantee as to the accuracy or completeness of any information provided in this datasheet.

Edwards Ltd, registered in England and Wales  
No. 6124750, registered office: Innovation Drive,  
Burgess Hill, West Sussex, RH15 9TW, UK.

EMEA  
UK +44 (0) 1444 253 000  
(local rate) 0845 921 2223  
Belgium +32 2 300 0730  
France +33 1 4121 1256  
Germany 0800 000 1456  
Italy +39 02 48 4471  
Israel +972 8 681 0633

ASIA PACIFIC  
China +86 400 111 9618  
India +91 20 4075 2222  
Japan +81 47 458 8836  
Korea +82 31 716 7070  
Singapore +65 6546 8408  
Taiwan +886 3758 1000

AMERICAS  
USA +1 800 848 9800  
Brazil +55 11 3952 5000

