

# INTERFACE BOX<sub>SMART</sub>

Optimize your connectivity



**Flexibel - efficient - universal.**

The IFB-S is primarily intended for communication between EBARA vacuum pumps and the surrounding basement.

The IFB-S is the perfect connection with the surrounding basement.

## BENEFITS OF IFB-S

- High flexibility
- Simple connection via standardized interfaces
- Protocol converter on board
- Transmission of external control signals to the pump
- Automatic monitoring of control signals
- All-in-one-kits

# Development

Listening to our customers and defining with them their requirements, EBARA Precision Machinery Europe ("EPME") decided to develop further the interface box which was designed 15 years ago. Engineered and produced in Germany the new interface box smart has various interfaces and can therefore be used universally. This means a high degree of flexibility and the possibility of interconnecting all pump signals. On this base EPME improved functionality and cost effectiveness

The IFB-S is primarily intended for communication between EBARA vacuum pumps and the surrounding basement. Due to its versatile wiring, simple connection via standardized interfaces, and extremely robust design, the IFB-S is suitable for a wide range of tasks requiring secure signal transmission with galvanic isolation of the outputs and inputs, as well as their linking and duplication. The IFB is also ideally suited for the transmission and automatic monitoring of control signals in the 24V DC range thanks to its own powerful 24V power supply.

Frequently occurring connections and logical functions used in the semiconductor industry are already provided ready for plugging in, or are fully specified for specific applications. By modifying the plc program running on the IFB-S, the existing configuration can be quickly modified by our engineering team.

## INTERFACE BOX SMART

### Connection Overview

- Standard cable feed through for sensors and actors
- Specific tool connector for different suppliers to directly connect the tool signal cable
- 12 freely programmable LED's for status information
- Ethernet connector for monitoring purposes
- Onboard protocol converter from RS232 to Modbus TCP



# Specification Overview



## AMAT Specification

- With AMAT amphenol connector
- Software for AMAT standard signals
- Pin-signal-assignment can be adapted by PLC software



## LAM / Novellus Specification

- With D-SUB 9 Pin connector
- Software for LAM standard signals
- Pin-signal-assignment can be adapted by PLC software



## Universal

- No tool specific connector, cable feed through x2
- Software can be adjusted to specific needs

## DIN Rail

- Only mainboard
- No specific tool connector
- Can be mounted on standard DIN Rail

# The Programming Interface Principle

- Simple PLC logic
- Pre-defined Functions
- Four physical DIP switches and one BCD switch are available for predefined functions (e.g. maintenance mode, GV forced open or closed).

## Complete Kits

EBARA offers complete kits with different accessories. Find the best solution for your requirement and vacuum pump.

### Benefit from:

- Less different PN's to order
- Less cable work since the cables come with open end and ferrules
- No soldering or crimping necessary
- All-in-one kits



## Vacuum Pumps & Gas Abatement

EBARA offers a wide range of vacuum pumps and turbomolecular pumps for all vacuum requirements. To complete the system our gas abatement tools work efficiently and save energy.



EBARA is a worldwide leading global manufacturer of vacuum and semiconductor systems used in the production of wafers, liquid crystals, solar cells and other products requiring advanced technology.

EBARA supports



United Nations  
Global Compact

EBARA Precision Machinery Europe (EPME) is part of the Japanese EBARA Group. The portfolio includes dry and turbo molecular vacuum pumps as well as gas abatement systems. In addition, EPME sells state-of-the-art CMP tools, wafer bevel polishing and substrate coating systems. In Europe, EPME has a central warehouse and two overhaul centres for vacuum pumps

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## 100% Peace of Mind

EBARA stands for innovative solutions to protect our environment. Support our globe is our philosophy to save energy and waste.

Peace of Mind is our credo in customer care. We listen to our customers and find together with them the best solution. As our customer you can focus on your core business. EBARA takes care about vacuum, gas abatement, CMP and service. Let's talk together.

