# HEIDENHAIN
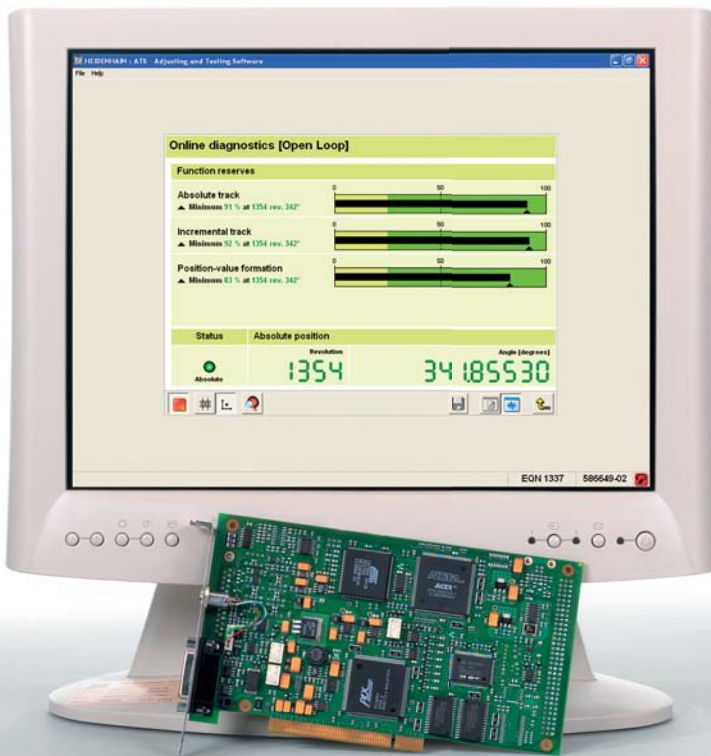
Product Information

# IK 215
# ATS Software
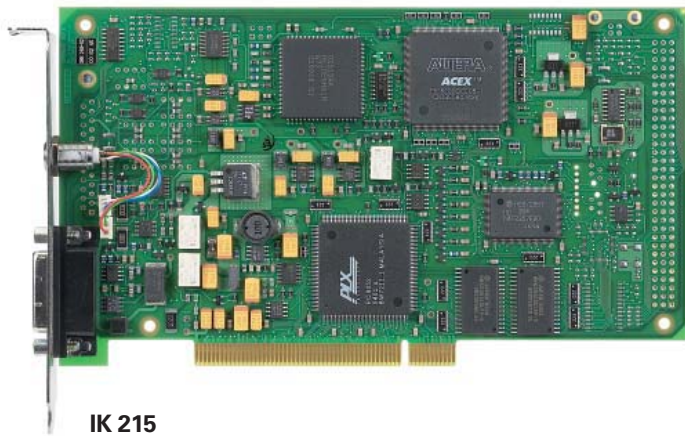
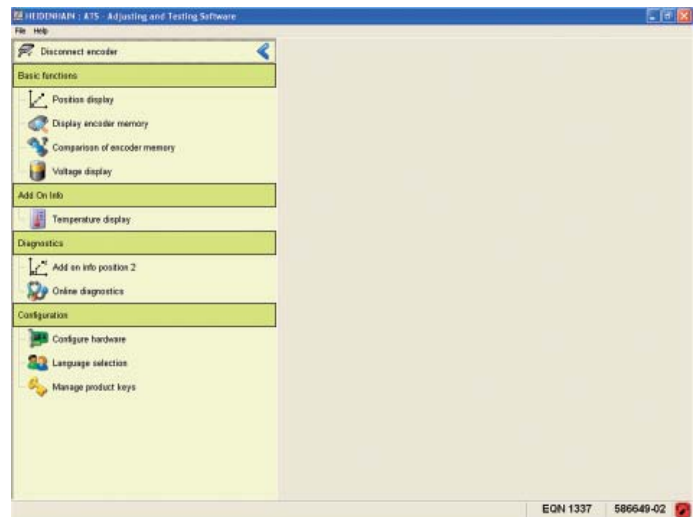# Adjusting and Testing Package

HEIDENHAIN offers an adjusting and testing package for diagnosis and adjustment of HEIDENHAIN encoders with absolute interface. It consists of the following components:
- IK 215 interface card for direct installation in a PCI expansion slot of a PC.
- **A**djusting and **T**esting **S**oftware (**ATS**) with integrated local encoder database for automatic encoder identification.

The functions supported by the ATS software vary depending on the encoder and the encoder interface. The EnDat interface makes it possible not only to display the position value but also to read out the online diagnostics, to read or write parameters, shift datums, set write-protection and use further inspection functions, etc .



**IK 215**



**ATS software**

# IK 215 Interface Card

|  | **IK 215** |
|---|---|
| **Area of application** | • Functional check of absolute HEIDENHAIN encoders<br>• Mounting wizard for inductive encoders with EnDat interface (ECI/EQI) |
| **Encoder input** | • EnDat 2.1 or EnDat 2.2 (absolute value with/without incremental signals)<br>• Fanuc Serial Interface<br>• Mitsubishi High Speed Serial Interface<br>• SSI |
| **Interface** | PCI bus, Rev. 2.1 |
| **System requirements** | • IBM PC or 100% compatible PC (clock frequency > 1 GHz recommended)<br>• PCI local bus as per Rev. 2.1 specifications |
| **Signal subdivision** | Resolution up to 65 536-fold |
| **Dimensions** | 100 mm x 190 mm |

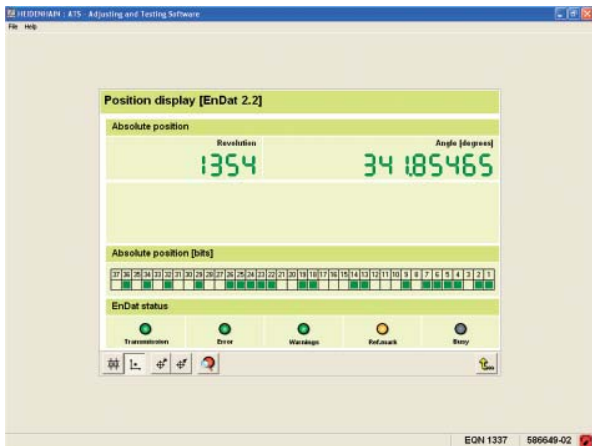# ATS Adjusting and Testing Software

|  | ATS software |
|---|---|
| **System requirements** | • Operating system: Windows XP/(Vista upon request)<br>• Approx. 20 MB free space on the hard disk |
| **Product key** | Management of product keys for optional functions |
| **Languages** | Choice between German or English |

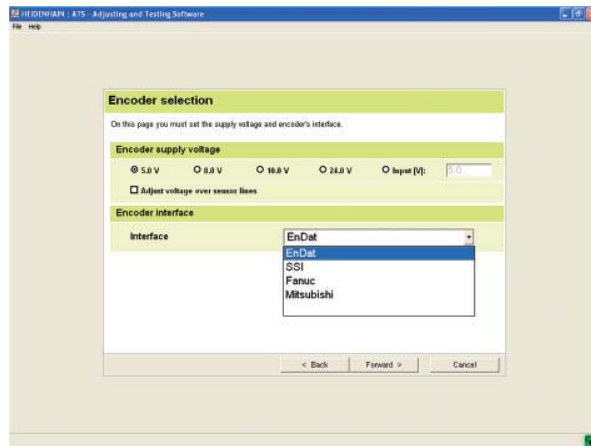| Available functions | EnDat | Fanuc | Mitsubishi | SSI |
|---|---|---|---|---|
| **Position display**<br>• Display of the absolute position<br>• Display of the incremental position (if available)<br>• Display and resetting of error messages<br>• Display and resetting of warnings<br>• Display of transmission status | ✔<br>✔<br>✔<br>✔<br>✔ | ✔<br>–<br>✔<br>–<br>✔ | ✔<br>–<br>✔<br>–<br>✔ | ✔<br>✔<br>–<br>–<br>(✔) |
| **Connection dialog**<br>• Automatic connection using ID number<br>• Connection by indicating the supply voltage and interface | ✔<br>✔ | ✔<br>✔ | ✔<br>✔ | ✔<br>✔ |
| **Diagnostics**<br>• Display of online diagnostics (open-loop and closed-loop mode) if supported by the encoder (e.g. LC xx3)<br>• Circular diagram of incremental signals (if available)<br>• Display of supply voltage and supply current | ✔<br><br>✔<br>✔ | O<br><br>–<br>✔ | O (in development)<br>–<br>✔ | –<br><br>✔<br>✔ |
| **Mounting wizard for ECI/EQI**<br>• Wizard for mounting inductive encoders | ✔ | – | – | – |
| **Additional functions (if supported by the encoder)**<br>• Comparison of absolute position with incremental position<br>• Datum shift ("electrical zeroing of position")<br>• Display of additional information: Temperature<br>• Display of additional information : Position value 2<br>• Display of additional information: Additional sensors<br>• Display of additional information: Limit position signals<br>• Display of additional information: Operating status error sources | ✔<br>✔<br>✔<br>✔<br>✔<br>✔<br>✔ | –<br>–<br>–<br>–<br>–<br>–<br>– | –<br>–<br>–<br>–<br>–<br>–<br>– | ✔<br>–<br>–<br>–<br>–<br>–<br>– |
| **Memory contents**<br>• Display of memory contents<br>• Modification to memory contents<br>• Saving the memory allocation<br>• Comparison of current memory contents with saved memory contents | ✔<br>✔<br>✔<br>✔ | –<br>–<br>–<br>– | –<br>–<br>–<br>– | –<br>–<br>–<br>– |

✔ = available
O = optional
– = not available

# ATS Software
## Some of the ATS Software Functions
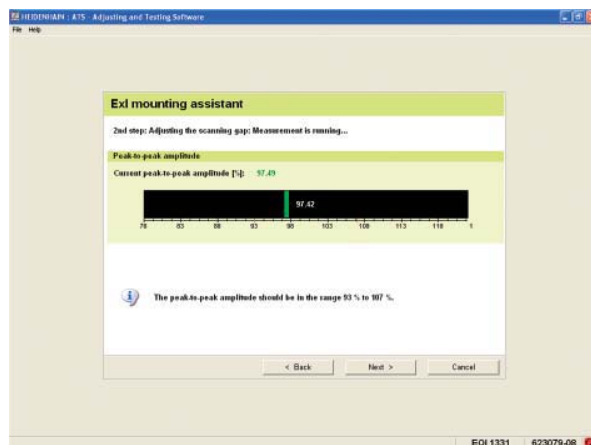


Position display
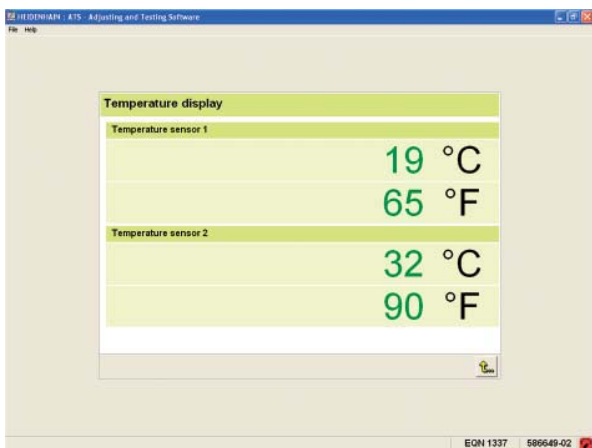


Connection dialog
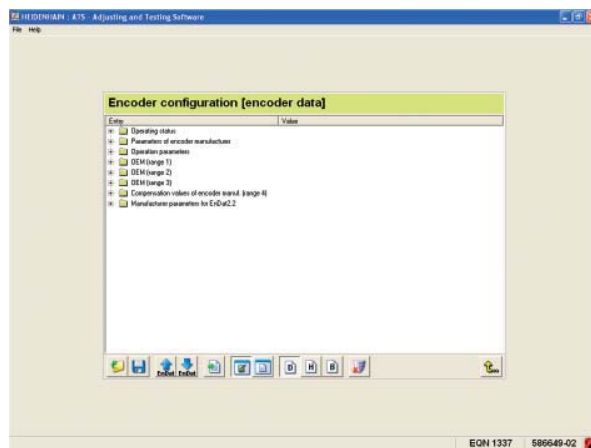


Online diagnostics



Mounting wizard



Additional function: Temperature display



Display of memory contents

# HEIDENHAIN