IQ SENSOR NET
MIQ/A

Fully automatic air pressure compensation
in the IQ SENSOR NET system 2020 XT USB
Note
For the most recent version of the manual, please visit www.ysi.com.
# MIQ/A - Contents

1 **Overview** .............................. 7  
   1.1 How to use this component operating manual ........ 7  
   1.2 Features of the MIQ/A ........................... 8  

2 **Safety instructions** ...................... 9  
   2.1 Authorized use .............................. 9  
   2.2 General safety instructions .................. 10  

3 **Installation** ............................ 11  
   3.1 Scope of delivery ........................... 11  
   3.2 Installation in the IQ SENSOR NET ............ 11  

4 **Maintenance and cleaning** ................ 13  
   4.1 Maintenance ............................... 13  
   4.2 Cleaning .................................. 13  

5 **Technical data** ........................... 15  

6 **Contact Information** ..................... 17  
   6.1 Ordering & Technical Support ............... 17  
   6.2 Service Information ........................ 17
1 Overview

1.1 How to use this component operating manual

The IQ SENSOR NET operating manual has a modular structure like the IQ SENSOR NET system itself. It consists of a system operating manual and the operating manuals of all the components used.

Please file this component operating manual into the ring binder of the system operating manual.
1.2 Features of the MIQ/A

General characteristics

The MIQ/A module extends the IQ SENSOR NET system 2020 XT USB by a fully automatic air pressure compensation for D.O. sensors (see system operating manual).

With the standard MIQ module housing, the MIQ/A has the same characteristics as all MIQ modules regarding stability, leakproofness and weather resistance. It also provides the same wide variety of installation options (stacked mounting, canopy mounting, tophat rail mounting, etc.).
2 Safety instructions

This component operating manual contains special instructions that must be followed during the installation of the MIQ/A module. Thus, it is essential to read this component operating manual before carrying out any work using this sensor. In addition to this manual, the SAFETY chapter of the IQ SENSOR NET system operating manual must be followed.

Always keep this component operating manual together with the system operating manual and all other component operating manuals in the vicinity of the IQ SENSOR NET system.

Directions

The following symbols indicate special features in the individual chapters of this operating manual:

Note indicates notes that draw your attention to special features.

Note indicates cross-references to other documents, e.g. operating manuals.

2.1 Authorized use

Authorized use of the MIQ/A module consists of the fully automatic air pressure compensation for D.O. sensors in the IQ SENSOR NET 2020 XT USB.

The technical specifications according to chapter 5 TECHNICAL DATA must be observed. Only operation according to the instructions in this operating manual is authorized.

Any other use is considered to be unauthorized. Unauthorized use invalidates any claims with regard to the guarantee.
2.2 General safety instructions

The MIQ/A is constructed and inspected in accordance with the relevant guidelines and norms for electronic instruments (see chapter 5 TECHNICAL DATA).

It left the factory in a safe and secure technical condition.

Function and operational safety

The failure-free function and operational safety of the MIQ/A is only guaranteed if the generally applicable safety measures and the special safety instructions in this operating manual are followed during its use.

The failure-free function and operational safety of the MIQ/A is only guaranteed under the environmental conditions that are specified in chapter 5 TECHNICAL DATA.

Safe operation

If safe operation is no longer possible, the MIQ/A must be taken out of operation and secured against inadvertent operation.

Safe operation is no longer possible if the MIQ/A:

- has been damaged in transport
- has been stored under adverse conditions for a lengthy period of time
- is visibly damaged
- no longer operates as described in this manual.

If you are in any doubt, contact the supplier of your MIQ/A.
3 Installation

3.1 Scope of delivery

The following parts are included in the scope of delivery of the MIQ/A:

- MIQ/A.
- 4 x screwed cable glands with seals and blind plugs
- 2 x ISO blind nuts (M4)
- 2 x cheese-head screws (M4x16) with plastic washer
- 1 x contact base
- 2 x plastic tapping screws for fixing the contact base
- Operating manual.

3.2 Installation in the IQ SENSOR NET

General installation instructions

The IQ SENSOR NET provides a number of options for integrating the MIQ/A mechanically and electrically in the system (stacked mounting, distributed mounting, etc.). The individual types of installation are described in detail in the INSTALLATION chapter of the system operating manual.
4 Maintenance and cleaning

4.1 Maintenance

The MIQ/A requires no special maintenance. The general maintenance of IQ SENSOR NET components is described in the IQ SENSOR NET system operating manual.

4.2 Cleaning

The cleaning of IQ SENSOR NET components is described in the IQ SENSOR NET system operating manual.
## Technical data

### Note

General technical data on MIQ modules are given in the TECHNICAL DATA chapter of the IQ SENSOR NET system operating manual.

### Electrical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>Max. 24 VDC via the IQ SENSOR NET (for details, see chapter TECHNICAL DATA of the IQ SENSOR NET system operating manual).</td>
</tr>
<tr>
<td>Power consumption</td>
<td>Approx. 1.5 W</td>
</tr>
<tr>
<td>Protective class</td>
<td>III</td>
</tr>
<tr>
<td>Number of MIQ/A in a IQ SENSOR NET system</td>
<td>1</td>
</tr>
</tbody>
</table>

### Instrument safety

<table>
<thead>
<tr>
<th>Applicable norms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>– EN  61010-1</td>
<td></td>
</tr>
<tr>
<td>– UL 3111-1</td>
<td></td>
</tr>
<tr>
<td>– CAN/CSA C22.2 No. 1010.1</td>
<td></td>
</tr>
</tbody>
</table>

### Terminal connections

<table>
<thead>
<tr>
<th>IQ SENSOR NET connections</th>
<th>2 additional SENSORNET terminators that can be activated (terminating resistors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal type</td>
<td>Screw-type terminal strip, accessible by opening the lid</td>
</tr>
<tr>
<td>Terminal ranges</td>
<td>Solid wires: 0.2 ... 4.0 mm² AWG 24 ... 12</td>
</tr>
<tr>
<td></td>
<td>Flexible wires: 0.2 ... 2.5 mm²</td>
</tr>
<tr>
<td>Cable feeds</td>
<td>4 cable glands M16 x 1.5 on the underside of the module</td>
</tr>
</tbody>
</table>
6 Contact Information

6.1 Ordering & Technical Support

Telephone:    (800) 897-4151
              (937) 767-7241
              Monday through Friday, 8:00 AM to 5:00 PM ET

Fax:          (937) 767-1058

Email:        environmental@ysi.com

Mail:         YSI Incorporated
              1725 Brannum Lane
              Yellow Springs, OH 45387
              USA

Internet:     www.ysi.com

When placing an order please have the following information available:

YSI account number (if available)  Name and Phone Number
Model number or brief description  Billing and shipping address
Quantity                            Purchase Order or Credit Card

6.2 Service Information

YSI has authorized service centers throughout the United States and Internationally. For the nearest service center information, please visit www.ysi.com and click ‘Support’ or contact YSI Technical Support directly at 800-897-4151.

When returning a product for service, include the Product Return form with cleaning certification. The form must be completely filled out for an YSI Service Center to accept the instrument for service. The Product Return form may be downloaded at www.ysi.com and clicking on the ‘Support’ tab.