ORION®

Alentec & Orion AB   SWEDEN

OriLink®
Monitoring System

PC-Interface / SIO Module, 23 403

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1. Introduction

The SIO module is an accessory OriLink®. With this the system can be connected to a PC. It can also be used to amplify signals if the communication loop is more than 2000 meters.

> **NOTE! The Orilink® installation manual should be available when installing the module.**

2. Mechanical installation

The SIO module is delivered mounted in a box with a DSUB 9-pin serial cable.

A module in a box is mounted on a wall or other suitable place close to a PC using the four ø5 mm holes in the bottom of the casing. The serial cable is 3 meters.

If a small and compact system is needed the PCB version can be mounted in a PM or MPDM. The chassis-connector on the flat cable is mounted in the "knock-out" hole, see chapter 6.

3. Electrical installation

The module has four connectors **(A)** in two groups. The four connectors are marked **A**, **B**, **+24 V** and **Gnd**. Use these to connect the module to an existing system. Consult the cable recommendations in the OriLink installation manual.

> **NOTE! +24VDC may only be connected to one connector.**

At the connector **(B)** you connect the flat cable for RS-232 serial communication with a PC. Communication through this port is indicated by LED **(C)**.
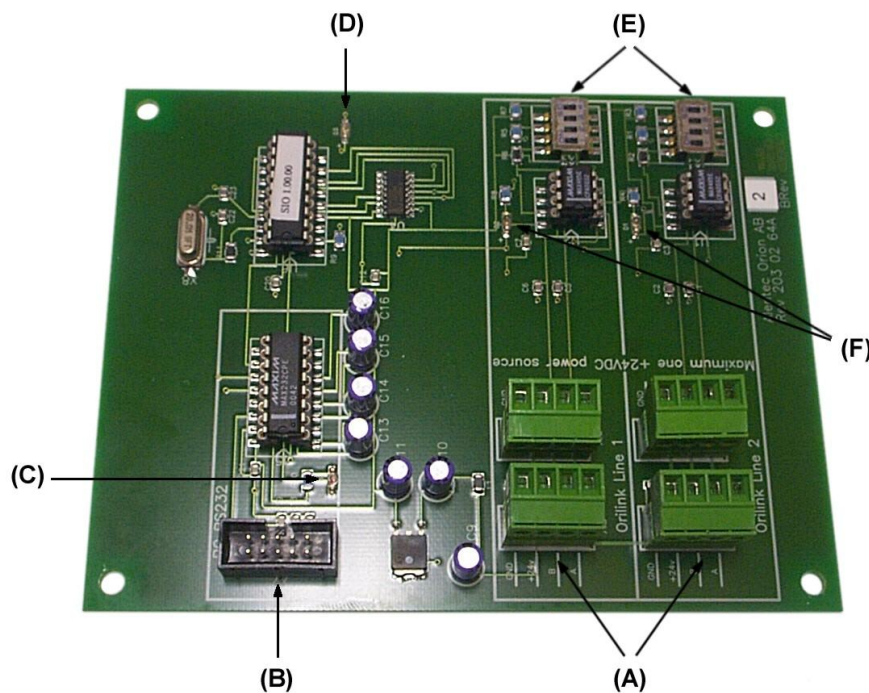
The LED **(D)** is lit when the system is working properly.

If the module is used as a signal amplifier one communication loop should be connected to one Line and the other loop to the other Line. **You must set termination and BIAS for BOTH groups. DIL-switches at (E).**

The PCB gets its power from the communication loop. Kretskortet tar sin spänningsmatning från kommunikationsslingan. If the module is placed far away from a MPDM it is possible to apply an external power-supply to **one** of the connectors **(A)**.

> **NOTE! If only one line is used the other one must be terminated, all switches in the ON position.**

Two LED at **(F)** indicate communication in their respective group.

4. Configuration

The SIO module has nothing to configure.

> **NOTE! To obtain technical support a copy of the configuration sheet for the complete installation must be sent to Alentec Orion AB at**
>
> **Alentec & Orion AB**
> **TECHNICAL SUPPORT**
> **Grustagsvägen 4**
> **SE-138 40 ÄLTA**
> **SWEDEN**

or

> **orilink@alentec.se**

5. Technical specification

Net-ports:	4 ORILINK® ports **(A)** in two separate lines for data communication.
Out ports:	1 RS-232 port (B) for communication with a PC
Other:	RISC-based microprocessor
Supply voltage:	24 VDC through com.-loop or external
Max current:	100 mA
Casing:	**Strong black powder painted steel box**.
Outer measures:	230 x 195 x 55 mm.
Mounting:	4 ø5mm CC = 175 x 140 mm
Weight:	1,7 kg (mounted in steel box)
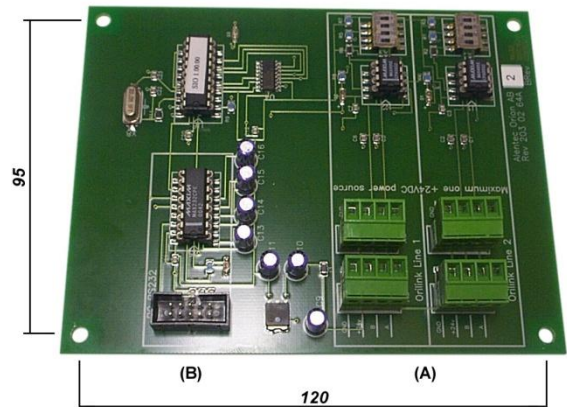
6. PCB placed in a PM or MPDM

In small systems or due to lack of space the module PCB can be placed inside a PM or MPDM. The two PCBs must be turned a quarter of a turn and placed side-by-side, see below.

If the module is installed in a MPDM use the included plastic distances (slightly shorter than those in a MPDM) for the PCB mounted closest to the main power switch.

Make sure the power is turned off before installing anything. Use a voltmeter to make sure the MPDM has no current at all.

Turn the existing PCB a quarter of a turn in the box. Move the plastic distances so you can fit the card as seen in the pictures below. Be careful not to damage the cables.

PM standard   PM moved   PM+SIO

MPDM standard   MPDM moved   MPDM+SIO