



**Quick Start
Manual for
HI80AL**



Product Code:

HI80AL: 8 Analog I/Ps, 1 com port (1 * 2 wires RS485),
24 Vdc power supply.

DITEL (Diseños y Tecnología, S.A.)

P.I. Les Guixeres - C/ Xarol, 8-C
08915 Badalona, SPAIN

www.ditel.es

Thank you for purchasing our HIMOS Series product - HI80AL. This manual gives you a quick overview of the HIMOS model and it's software. Read this manual thoroughly before installing and operating the unit.

This document is based on information available at the time of it's publication and may not cover all the details or variations in hardware or software. Ditel reserve the right to update information in this publication without prior notice.

IMPORTANT

HIMOS Series Products are intended to be operator interfaces, to work with PLCs which actually take control actions. It is assumed that the user is well acquainted with the PLC system being used and Windows based software usage, in general. Never use HIMOS units to perform emergency stop applications. It is advised that separate switches be used outside the PLC for ANY emergency stops.

Any mechanical or electrical modification to this unit will void all warranties.

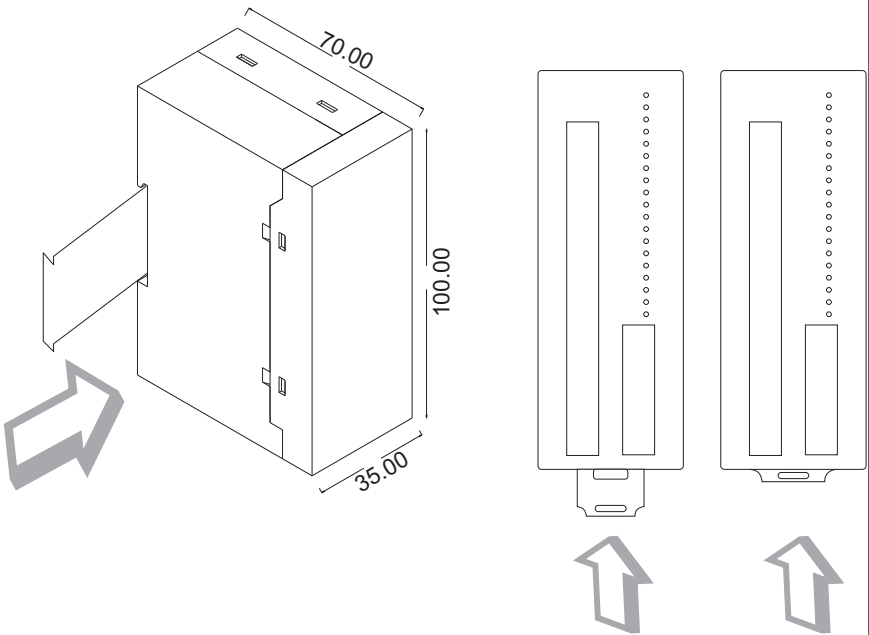
◆ **Introduction**

The HIMOS series Field I/O products add analog capability to your PLC / SCADA.

HI80AL model has 8 analog (Voltage & current) inputs. It has one (2 Wire RS485) communication port. The COM port is used to connect any modbus master device (PLC / SCADA / Operator Interface device). This module supports Modbus RTU (Slave) protocol.

◆ **Dimensional Details:**

HIMOS Series Field I/O units are shipped with a separate DIN rail plate which can be attached to the unit, if desired. User can use the unit with or without the DIN rail plate. Following sketch shows dimensional details of HIMOS Series Field I/O unit with the DIN rail plate.



◆ **PLC Communication**

The unit supports Modbus RTU (Slave) protocol. Dedicated Modbus registers are used for tracking analog Voltage and Current inputs. Unit scans all the inputs continuously and stores this information into the Input register. The communication parameters, unit address and operational modes (Voltage / current) are set by DIP switch.

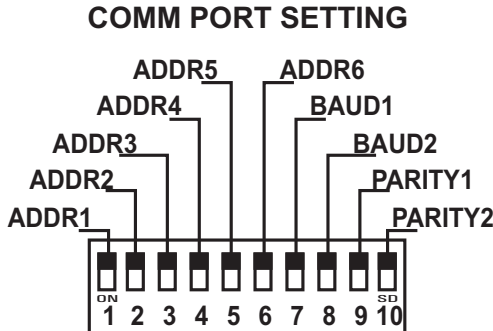
Specifications: -

- 1. Power Supply : 24 VDC +/- 10%
- 2. Analog Inputs : 8 Voltage and current inputs
(Input range: 0 to 10V and 4 to 20 mA)
- 3. Communication Port: 2 Wire RS-485
- 4. I/O Terminals : Pluggable terminals.
- 5. Operating Temperature: 0°C to 60°C
- 6. Storage Temperature : -20°C to 80°C
- 7. Humidity : 10% to 90% (Non condensing)
- 8. Mounting : DIN rail mounting
- 9. Dimensions (DIN rail) : 70 X 100 X 35 mm

Communication Parameters And Modbus Tag Definition

Unit supports MODBUS driver for communication with Master device.

◆ **Comm Port Settings:**

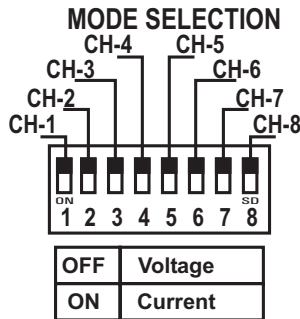


UNIT ID	ADDR6	ADDR5	ADDR4	ADDR3	ADDR2	ADDR1
1	0	0	0	0	0	0
2	0	0	0	0	0	1
.
.
.
64	1	1	1	1	1	1

BAUD RATE	BAUD2	BAUD1
9600	0	0
19200	0	1
57600	1	0
115200	1	1

PARITY	PARITY2	PARITY1
NONE	0	0
ODD	0	1
EVEN	1	0

Mode Settings:

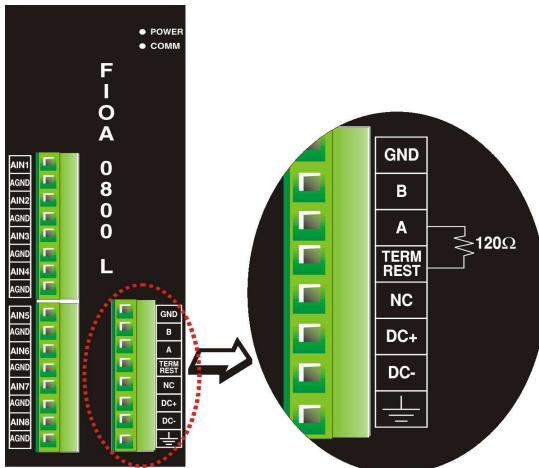


The following dedicated modbus registers assigned to analog inputs:

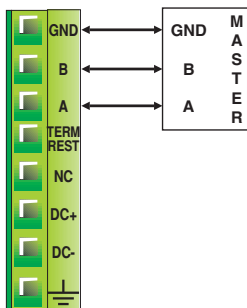
Analog Inputs	MODBUS Tag.
INPUT 1	40001
INPUT 2	40002
INPUT 3	40003
INPUT 4	40004
INPUT 5	40005
INPUT 6	40006
INPUT 7	40007
INPUT 8	40008

The Voltage/Current value shown in the Modbus registers in unsigned integer format.

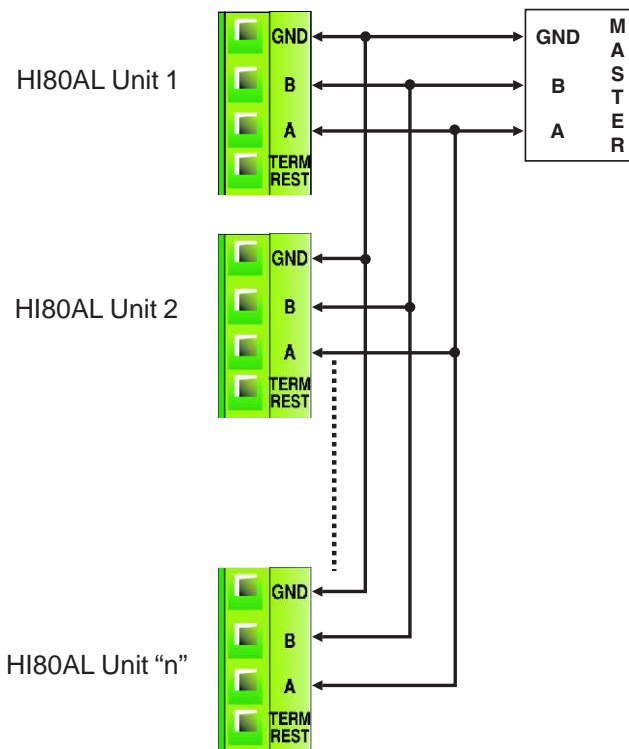
Port Details: (2 wire RS485)



For using internal termination resistor (120 Ohm), short "B" and "TERM REST"

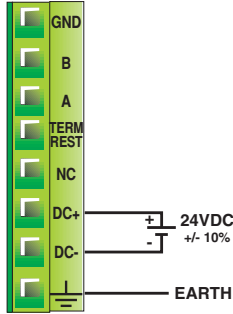


Multidropping connection:



Note: Where "n" is up to 32. Connecting repeater can increase it to 64.

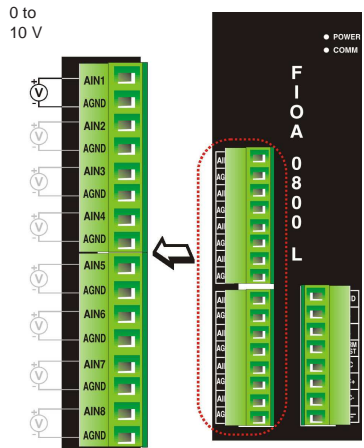
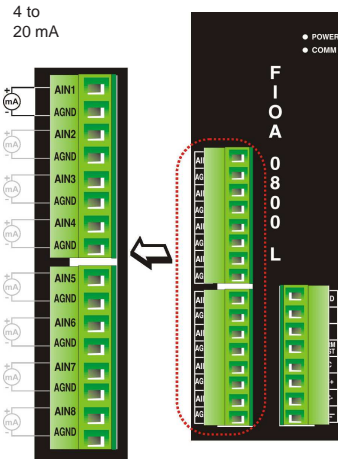
Power Supply Connection:



Input Connection:

Current Mode connections

Voltage Mode connections



Notes:

Notes:

◆ **Technical Support**

For Technical support please contact factory along with the unit serial number and revision number written on the address sticker of the unit. Also provide information of the PLC if used in application. Usually, including your application also provides a lot of help. If possible e-mail the application to us.

Ditel Support:
Phone: (00 34) 93 339 47 58
Email: himos@ditel.es

Address:
DITEL (Diseños y Tecnología, S.A.)
P.I. Les Guixeres - C/ Xarol, 8-C
08915 Badalona, SPAIN
Website: www.ditel.es

MANUAL REVISION

If you contact us in reference to this manual, please include the following document number

Name : User Manual For HI80AL
Part Number : QSRD513E
Document : QS/HI80AL/0108
Revision : 1.00

Revision Number	Document Number	Date	Description
Rev 1.00	QS/HI80AL/0108	11-01-2008	First Release.

