

Notes:

MANUAL REVISION

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

Name : User Manual For FIOA-0800-L-B
 Part Number : URML412
 Document : UMAN\FIOA-0800-L\0807
 Revision : 0

Rev No.	Doc. No.	Date	Description
Rev 0	UMAN\FIOA-0800-L\0807	01-08-2007	First Release



Renu Electronics Private Limited

Survey No. 2/6, Baner Road, Pune – 411 045
 Maharashtra, INDIA Tel: +91 20 2729 2840 Fax: +91 20 2729 2839

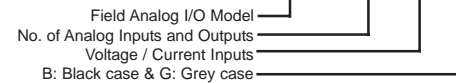
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Quick Start Manual for FIOA-0800-L



Product Code:

FIOA-0800-L-B/G



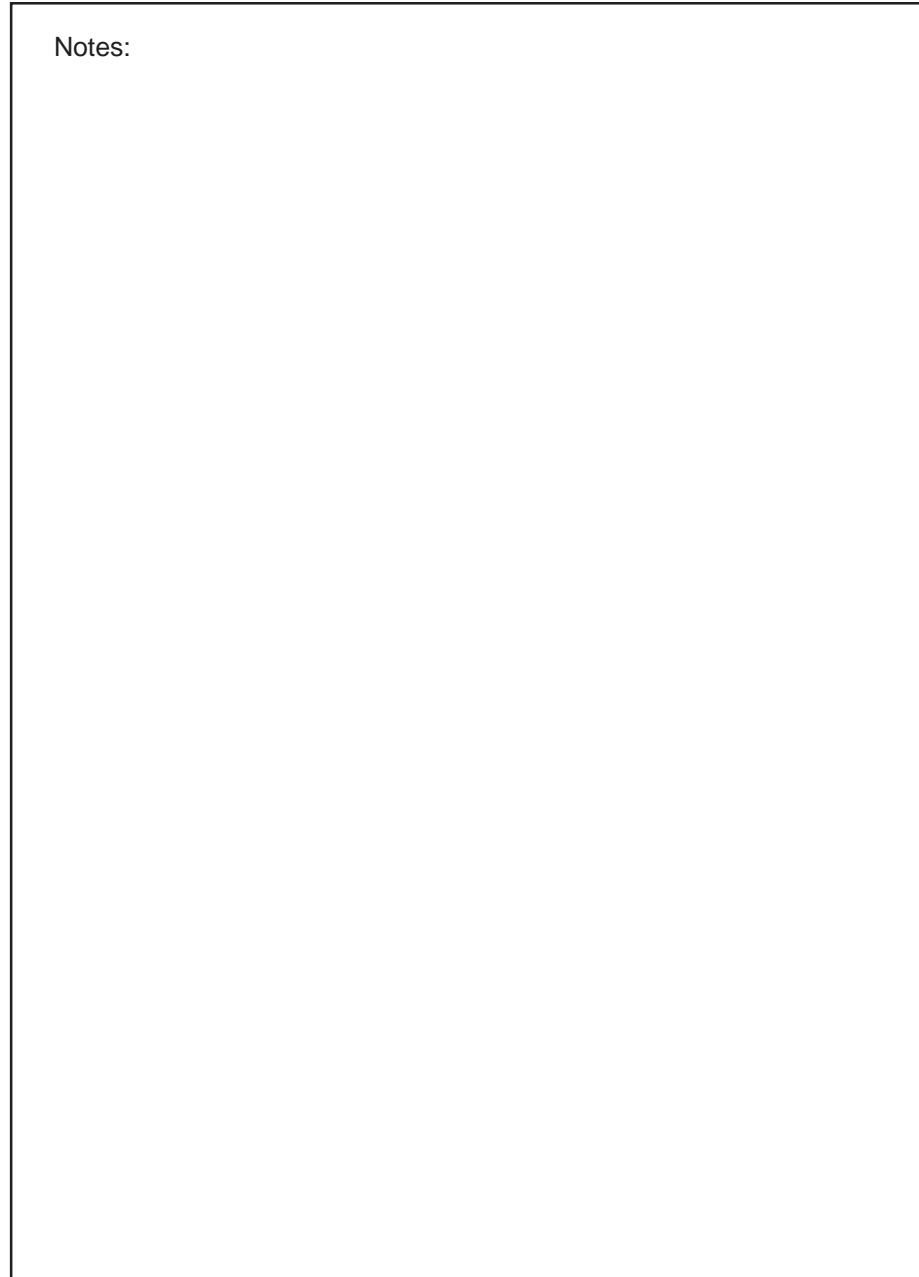
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Thank you for purchasing our FIOA Series product - FIOA-0800-L. This manual gives you a quick overview of this model. Read this manual thoroughly before installing and operating the unit.

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. Renu Electronics reserve the right to update information in this publication without prior notice.

IMPORTANT

FIOA 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 FIOA 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.

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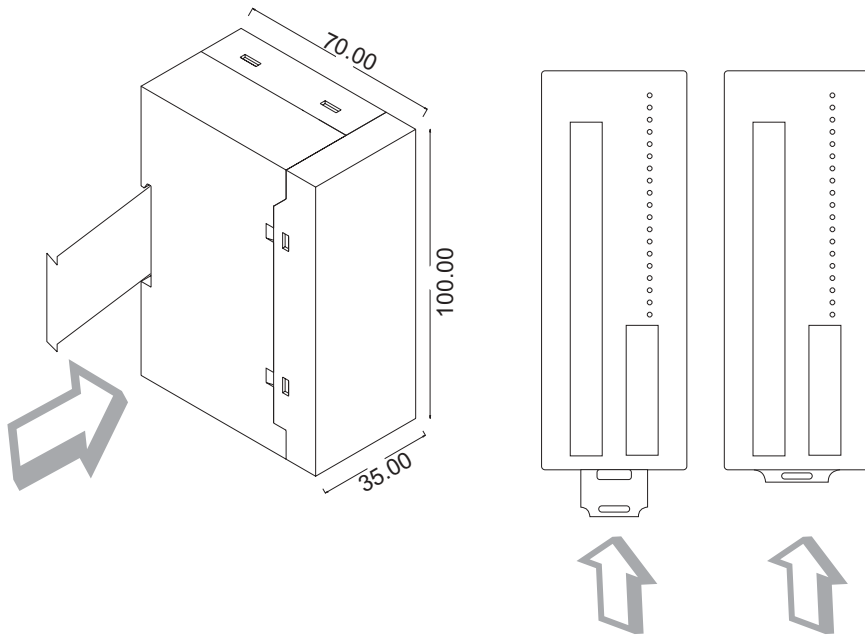
◆ **Introduction**

The FIOA series products add analog capability to your PLC / SCADA.

FIOA 0800 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:**

FIOA 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 FIOA with the DIN rail plate.



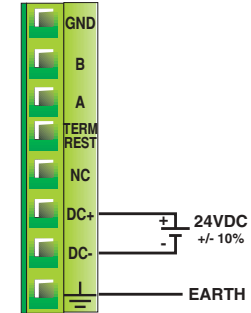
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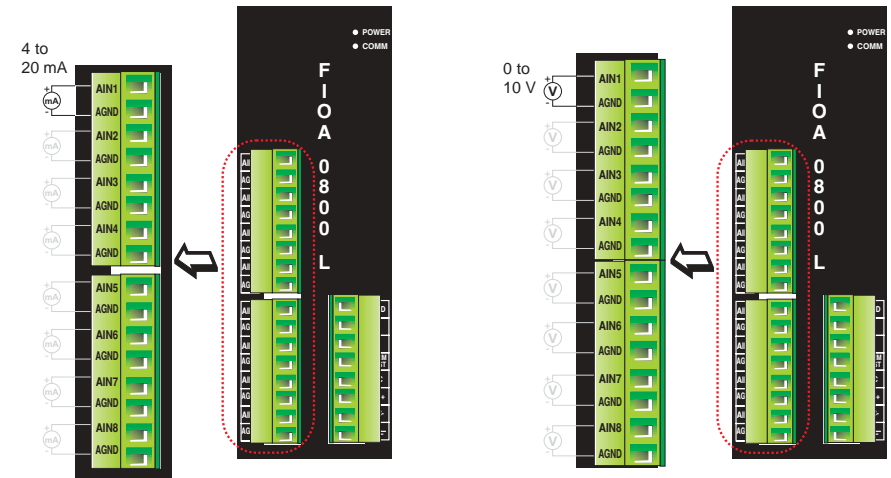
Power Supply Connection:



Input Connection:

Current Mode connections

Voltage Mode connections

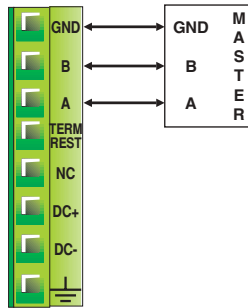


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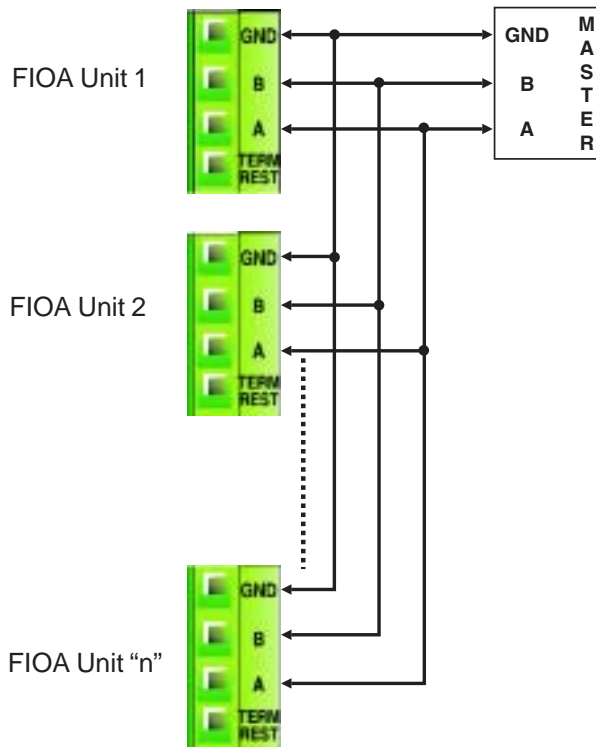
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Multidropping connection:



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



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◆ **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 Input register. The communication parameters, unit address and operational modes (Voltage / current) are set by DIP switch.

Specifications: -

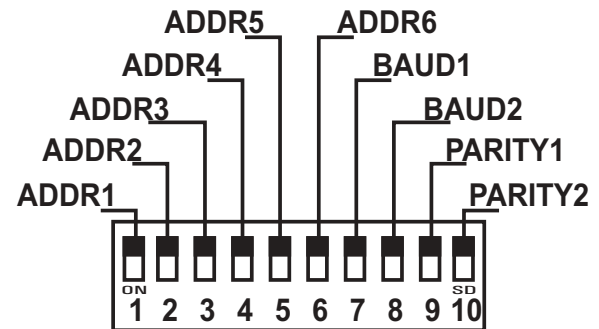
1. Power Supply : 24 VDC +/- 10%
2. Analog Inputs : 8 Voltage and current inputs
(Input range: 0 to 10V and 4 to 20 mA)
3. Communication Port : 2 Wire RS-485
4. I/O Terminals : Pluggable terminals.
5. Operating Temperature : 0°C to 60°C
6. Storage Temperature : -20°C to 80°C
7. Humidity : 10% to 90% (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:**

COMM PORT SETTING



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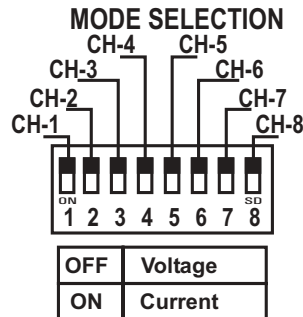
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UNIT ID	ADDR6	ADDR5	ADDR4	ADDR3	ADDR2	ADDR1
1	0	0	0	0	0	0
2	0	0	0	0	0	1
.
.
.
64	1	1	1	1	1	1

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:

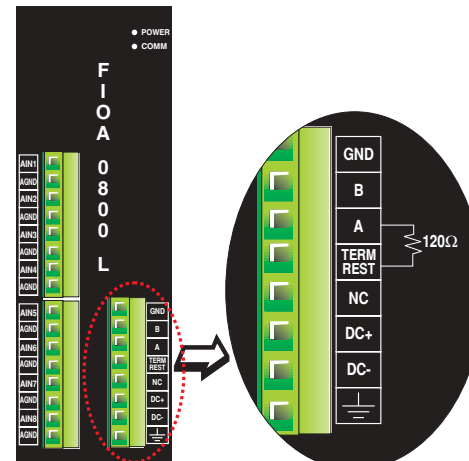


The following dedicated modbus registers assigned to analog inputs:

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"

