

## FD32DI

### 32 Digital Input Modbus Module

- 32 digital Input
- DIN-rail mounting
- Isolated Inputs
- Modbus RTU



### Connections and Measurements

It can be used as Remote I / O under PLC. It has 32 digital isolated inputs.

- o Digital Inputs (Dry contact)

Communicates with MODBUS RTU protocol via 1 RS-485 connection  
2 RS-485 ports on the device for easy operation. The status of all ports  
is indicated by communication signal and electric LED

## Technical Specifications

---

<b>General</b>	: 32 Bit işlemci ARM Cortex
<b>Supply Voltage</b>	: 24VAC ±%10 (50 - 60 Hz) veya 24VDC ±%10
<b>Power Consumption</b>	: 10VA
<b>I/O Ports</b>	: 32 Port Digital input
<b>Communication Protocol</b>	: MODBUS RTU (Slave)
<b>Operating Temperature</b>	: -20 °C to 70 °C
<b>Operating Humidity</b>	: %5 to %85
<b>Storage Temperature</b>	: -40 °C to 85 °C
<b>Storage Humidity</b>	: %5 to %95 (non-condensing)
<b>Device Size</b>	: 126 x 115 x 49 mm
<b>Package size</b>	: 126 x 115 x 49 mm
<b>Weight</b>	: 300 gr
<b>Mounting</b>	: 35mm DIN Rail or Wall
<b>Termination</b>	: Screw Terminal Block

Modbus Register address :

Register type (STATUS INPUT). Register addresses starting from 1 to 32 status inputs.  
( For PLC type can start from 0.)

**Modbus Adress:** FD 32DI The Deep-Switches on the device are used to set the Modbus address. Up to 255 addresses can be given. Each deep-switch indicates a number in binary number sequence.

- ❖ deep-switch 8 (ST128) = 128
- ❖ deep-switch 7 (ST64) = 64
- ❖ deep-switch 6 (ST32) = 32
- ❖ deep-switch 5 (ST16) = 16
- ❖ deep-switch 4 (ST8) = 8
- ❖ deep-switch 3 (ST4) = 4
- ❖ deep-switch 2 (ST2) = 2
- ❖ deep-switch 1 (ST1) = 1

**Modbus Speed:** The FD32DI Module communicates via the RS485 serial port in the Modbus RTU protocol. You can use deep-switches to set 4 BaudRate speed .

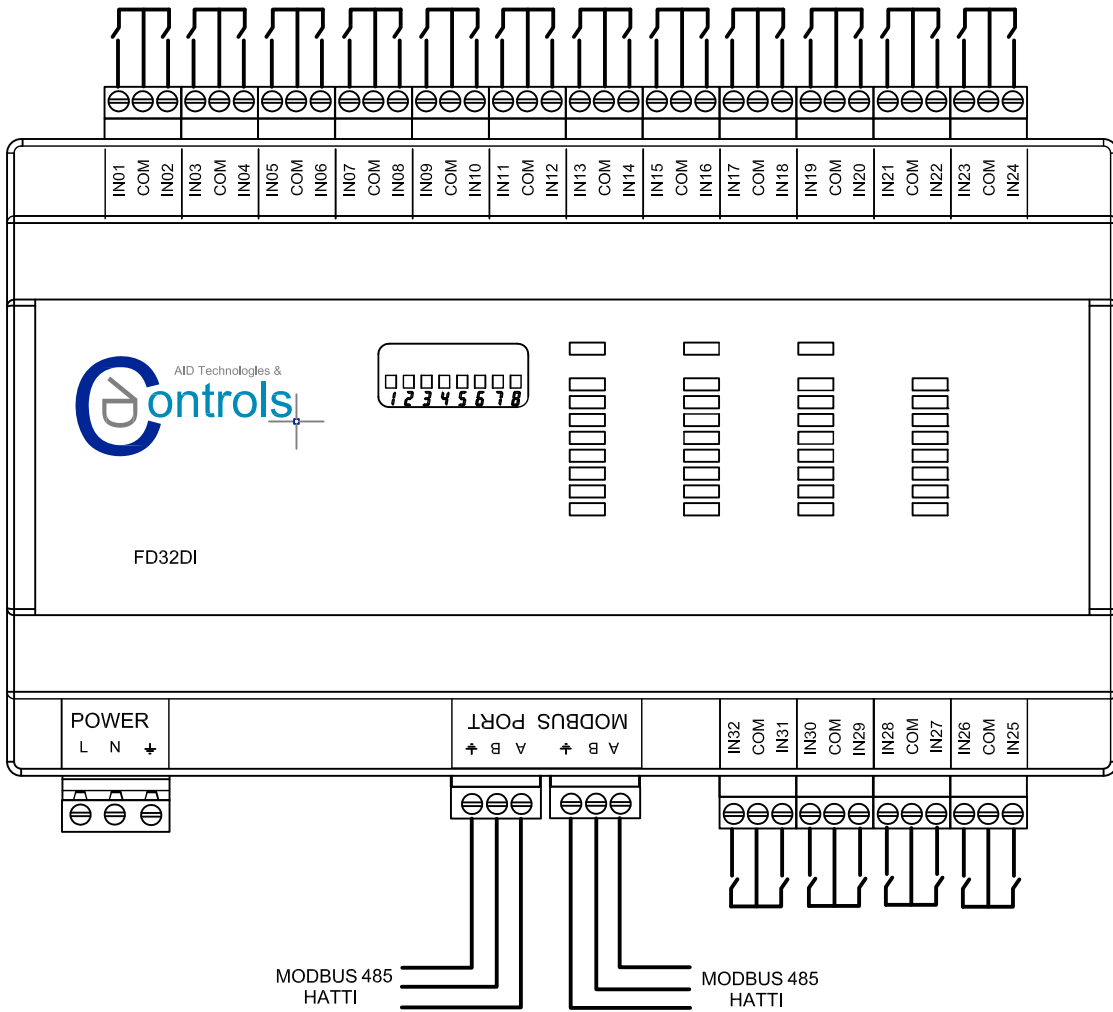
- |                        |                        |                       |                       |
|------------------------|------------------------|-----------------------|-----------------------|
| ❖ deep-switch 9 (off)  | ❖ deep-switch 9 (on)   | ❖ deep-switch 9 (off) | ❖ deep-switch 9 (on)  |
| ❖ deep-switch 10 (off) | ❖ deep-switch 10 (off) | ❖ deep-switch 10 (on) | ❖ deep-switch 10 (on) |
| BaudRate : 4800        | BaudRate : 9600        | BaudRate : 19200      | BaudRate : 38400      |

- ❖ **Databits** : 8
- ❖ **Parity** : None
- ❖ **StopBits** : 1

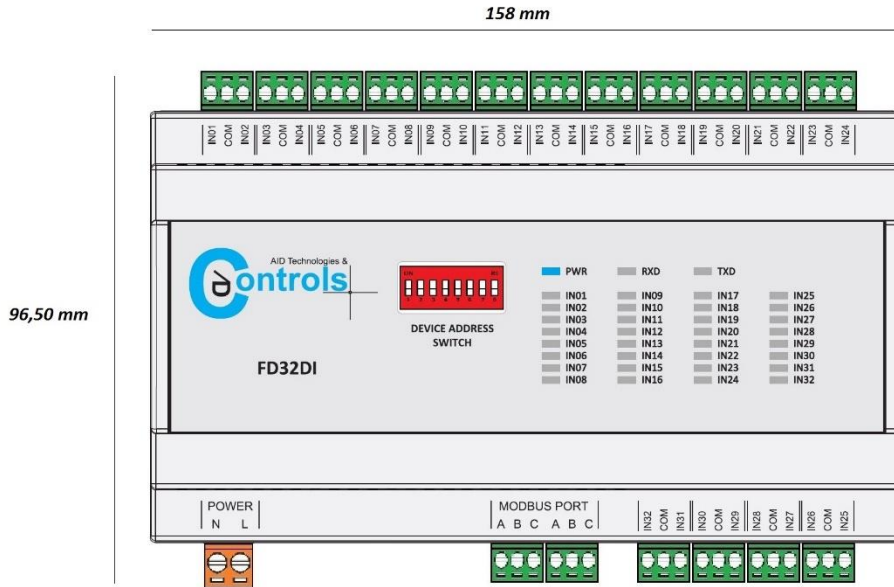
## DATA REGISTER LIST :


FD-32DI Register Map List							
MODBUS ADDRESS	Register Name	Read Write	Register Type	Scale	Min	Max	Description
1	Digital Input 1	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
2	Digital Input 2	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
3	Digital Input 3	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
4	Digital Input 4	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
5	Digital Input 5	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
6	Digital Input 6	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
7	Digital Input 7	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
8	Digital Input 8	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
9	Digital Input 9	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
10	Digital Input 10	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
11	Digital Input 11	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
12	Digital Input 12	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
13	Digital Input 13	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
14	Digital Input 14	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
15	Digital Input 15	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
16	Digital Input 16	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
17	Digital Input 17	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
18	Digital Input 18	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
19	Digital Input 19	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
20	Digital Input 20	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
21	Digital Input 21	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
22	Digital Input 22	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
23	Digital Input 23	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
24	Digital Input 24	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
25	Digital Input 25	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
26	Digital Input 26	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
27	Digital Input 27	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
28	Digital Input 28	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
29	Digital Input 29	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
30	Digital Input 30	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
31	Digital Input 31	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON
32	Digital Input 32	Read Only	Input Status - U16	1	0	1	0=OFF / 1=ON

# Wiring Diagram:



# Device Dimensions:



<p><b>Turkey :</b> UL Listed,Files ( TS EN 55024, TS EN 55032,TS EN 61000-3-2,TS EN 61000-3-3 TS EN 61000-4-3 ) Energy Management Equipment  <b>Equipment :</b> ( FD-32DI Model Only )</p>	<p><b>Compliance</b></p> 
<p><b>Contact :</b> Helenium Twins Residence Soğanlık Yeni Mah.Baltacı Mehmet Paşa Sk. No:1 B/Blok D/1 KARTAL – İSTANBUL  <b>Phone :</b> +90 216 306 31 28    <b>Mail :</b> www.aidcontrols.com</p>	

The performance specifications are nominal and conform to acceptable industry standard. For application at conditions beyond these specifications, consult the AID Controls office. AID Controls shall not be liable for damages resulting from misapplication or misuse of its products.