

DYNASERVO

Reliable, Affordable and High Performance



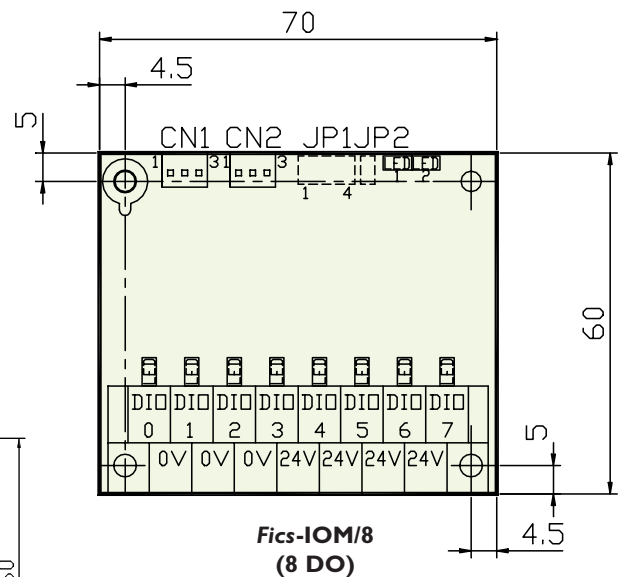
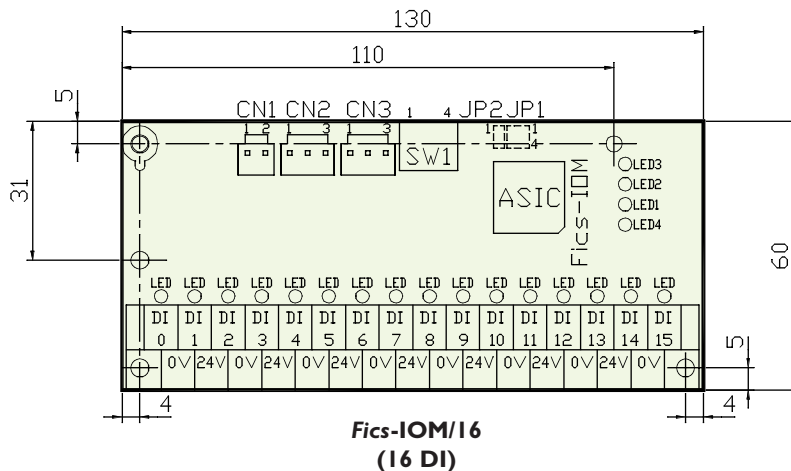
Fics-IOM/8,16 **Serial Network I/O Modules**

Fics-IOM/8,16 are DI/DO modules with terminal block connectors for I/O expansion of *Fics* serial controllers. *Fics-IOM/8* has 8 DO and *Fics-IOM/16* has 16 DI. They communicate with *Fics* serial controllers via a serial link that transfers data via standard RS422 protocol at rates up to 1.25Mbps. With just a twisted pair of wires, costs can be greatly reduced and machine reliability increased.



FEATURES

- RS422 communication with *Fics*-serial controllers at 1.25Mbps
- Minimal wiring and high reliability
- Max 16 modules can be connected in one link
- Opto-isolated DI and DO
- LED indicators
- 24V power supply



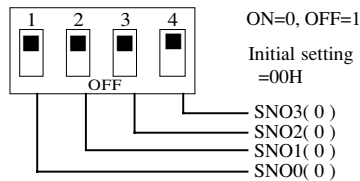
Fics -IOM/16: 16 bits digital input module

Specifications

- **Input signals**
 - Number of inputs:** 16
(2-wire type sensors are applicable)
 - Input circuit:** photo-coupler isolated
 - Input voltage:** 0V~power voltage +0.5V
 - Max. input current:** -10mA/DI
 - Min. sensitive current:** -2mA/DI
 - Input indicator:** 16 LED, LED ON when signal is LOW
 - Input signal connector:** terminal block (DI0 - DI15)
- **Communication Spec. (RS422)**
 - Speed:** 1.25Mbps
 - Address setting:** 4 bits DIP switch (SW1)
 - Status indication:** green LEDx2: sending & receiving, red LED: error
 - Max cable length:** 40m
(0.5mm² shielded twist-paired cable)
- **Power Supply**
 - Power voltage:** 24±10%
 - Current consumption:** 200mA
- **Working Environment:** 0°C~50°C/35~85%RH
(non-condensing)

Switches, Jumpers

SW1: Module number setting (0 ~ 15)
 JP1: 4pin RS422/optical link switch (default setting:RS422)
 <1-4>open <2-3>closed: RS422



<1-4>closed <2-3>open: optical link (option)
 JP2: 2pin open, fixed.

Power Supply

CN1: VHR-2N(JST)

Pin	Signal Name	IN/OUT
1	+24V	IN
2	0V	-

RS422 Input

CN2: VHR-3N(JST)

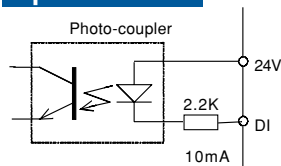
Pin	Signal Name	IN/OUT
1	RD+	IN
2	RD-	IN
3	GND	-

RS422 Output

CN3: VHR-3N(JST)

Pin	Signal Name	IN/OUT
1	SD+	OUT
2	SD-	OUT
3	GND	-

Input Interface



Fics -IOM/8: 8 bits digital output module.

Specifications

- **Output signals**
 - Number of outputs:** 8
 - Output circuit:** photo-coupler isolated open collector
 - Output voltage:** 0~power voltage
 - Rated Max. output:** 150mA/300V
 - Output saturation voltage:** less than 1V
(when output current is less than 80mA)
 - Leak current at OFF:** less than 20μA
 - Output indicator:** 8 LED, LED ON when output is LOW.
 - Output signal connector:** terminal block (DO0 - DO7)
- **Communication Spec. (RS422)**
 - Speed:** 1.25Mbps
 - Address setting:** 4 bits jumper switch(JP1)
 - Status indication:** green LED: receiving, red LED: error
 - Max cable length:** 40m
(0.5mm² shielded twist-paired cable)
- **Power Supply**
 - Power voltage:** 24V±10%
 - Current consumption:** 200mA
(Note) Connect the power supply to 24V, 0V of the terminal block.
- **Working Environment:** 0°C~40°C/35~85%RH

Jumpers

JP1: 8pin, module number setting (0 ~ 15).
 closed:0 open:1. Initial setting = 00.
 <1-8> 3rd bit of address
 <2-7> 2nd bit of address
 <3-6> 1st bit of address
 <4-5> 0th bit of address
 JP2: 2pin, open, fixed

RS422 Input

CN1: H3P-SHF-AA(JST)

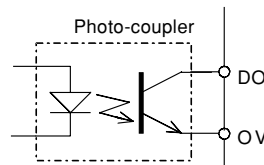
Pin	Signal Name	IN/OUT
1	RD+	IN
2	RD+	IN
3	GND	-

RS422 Output

CN2: H3P-SHF-AA(JST)

Pin	Signal Name	IN/OUT
1	SD+	OUT
2	SD+	OUT
3	GND	-

Output Interface



Attachments

Connectors are attached