DYNASERVO
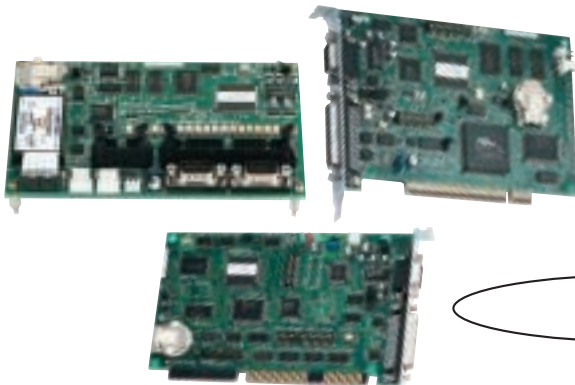
Reliable, Affordable and High Performance

Fics-IOM/16RI, *Fics*-IOM/16RO
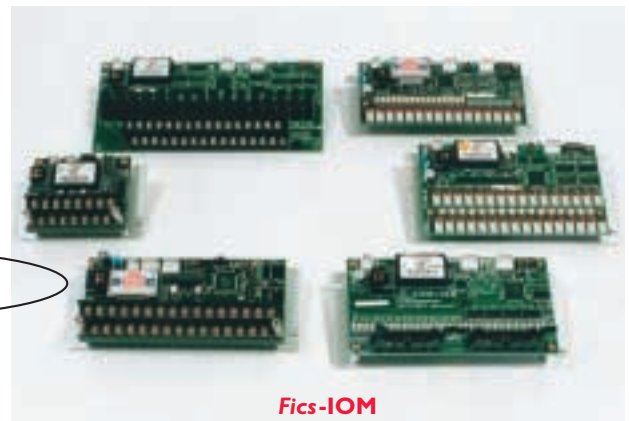## Relay Type Serial Network I/O Modules

Fics-IOM/16RI and *Fics*-IOM/16RO are relay type I/O modules with a terminal block for I/O expansion of *Fics* serial controllers. *Fics*-IOM/16RI and *Fics*-IOM/16RO 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
- Max 256DI/256DO
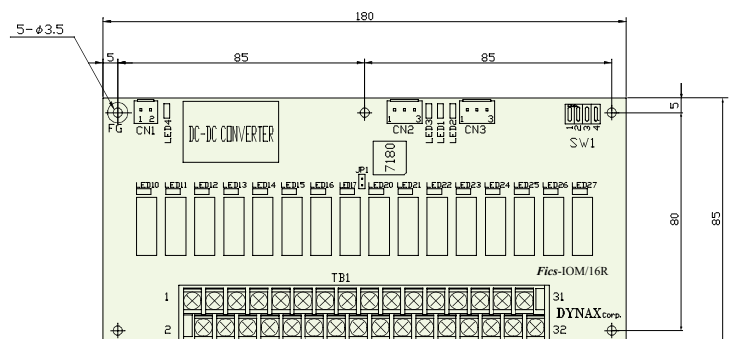- LED indicators
- Uniform 24V power supply

RS422

Fics-Serial Controller AT, PCI, SB

Fics-IOM

DYNASERVO INC.   email: sales@dynaservo.com   http://www.dynaservo.com
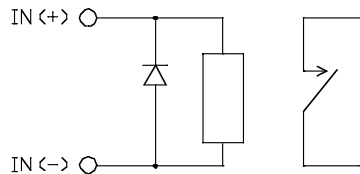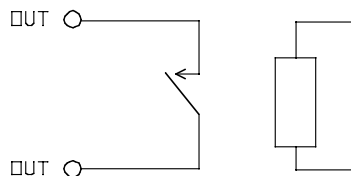
Fics -IOM/16RI, *Fics* -IOM/16RO

DI Circuit

- **Rated coil voltage/current:** 24V/8.3mA
- **Coil operating voltage:** lower than 18V
- **Coil restoring voltage:** higher than 2V
- **Coil Max voltage:** 30V

DO Circuit

- **Rated load:** AC250V, 3A
          DC30V, 3A
- **Contact capacity:** 1250VA
          150W

Communication Interface: RS422

- **Speed:** 1.25Mbps
- **Protocol:** IO-Ring
- **Address setting:** 4 bits DIP switch (SW1)
- **Status indicator:** Green LEDx2: sending,receiving
          Red LEDx1:error
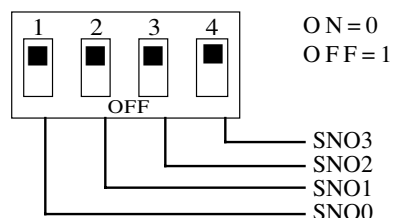- **Max cable length:** 40m (with 0.5mm² shielded twisted cable)

Electrical Specifications

- **Power supply:** 24V±10%
- **Current consumption:** 250mA

Working Environment: 0°C~40°C/35~85%RH
          (free from dew)

Switches , Jumpers

SW1 setting the module numbers between 0~15

ON = 0
OFF = 1

SNO3
SNO2
SNO1
SNO0

JP1: 2pin open, fixed.

LED

LED1 (red): wire disconnected error
LED2 (green): signal transferring
LED3 (green): signal receiving
LED4 (green): power-on
LED 10~17, 20~27 (red): DI/DO monitoring

Power Supply

CN1: VHR-2N(JST)

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

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	-

TB1 (*Fics*-IOM/16RI)

1	IN1(-)	2	IN1(+)
3	IN2(-)	4	IN2(+)
5	IN3(-)	6	IN3(+)
7	IN4(-)	8	IN4(+)
9	IN5(-)	10	IN5(+)
11	IN6(-)	12	IN6(+)
13	IN7(-)	14	IN7(+)
15	IN8(-)	16	IN8(+)
17	IN9(-)	18	IN9(+)
19	IN10(-)	20	IN10(+)
21	IN11(-)	22	IN11(+)
23	IN12(-)	24	IN12(+)
25	IN13(-)	26	IN13(+)
27	IN14(-)	28	IN14(+)
29	IN15(-)	30	IN15(+)
31	IN16(-)	32	IN16(+)

TB1 (*Fics*-IOM/16RO)

1	OUT1	2	OUT1
3	OUT2	4	OUT2
5	OUT3	6	OUT3
7	OUT4	8	OUT4
9	OUT5	10	OUT5
11	OUT6	12	OUT6
13	OUT7	14	OUT7
15	OUT8	16	OUT8
17	OUT9	18	OUT9
19	OUT10	20	OUT10
21	OUT11	22	OUT11
23	OUT12	24	OUT12
25	OUT13	26	OUT13
27	OUT14	28	OUT14
29	OUT15	30	OUT15
31	OUT16	32	OUT16

Attachment: Connectors are attached.