

LSDIM01-1-R DI module

LS communication Digital inputs : 16 2count/pulse

■ Summary



- * Number of inputs : 16 (16 ch common isolation)
- * Module ambient temperature : 0 to 55°C
- * Isolation : Digital isolation
Transformer insulation
- * Count : 2 count/pulse
- * Supported FXtoLS adapter : LSRLTS-DI01, LSRLTS-DI11



This module is dedicated to compact retrofit terminal blocks.
Dedicated lock pins are attached to the bottom.

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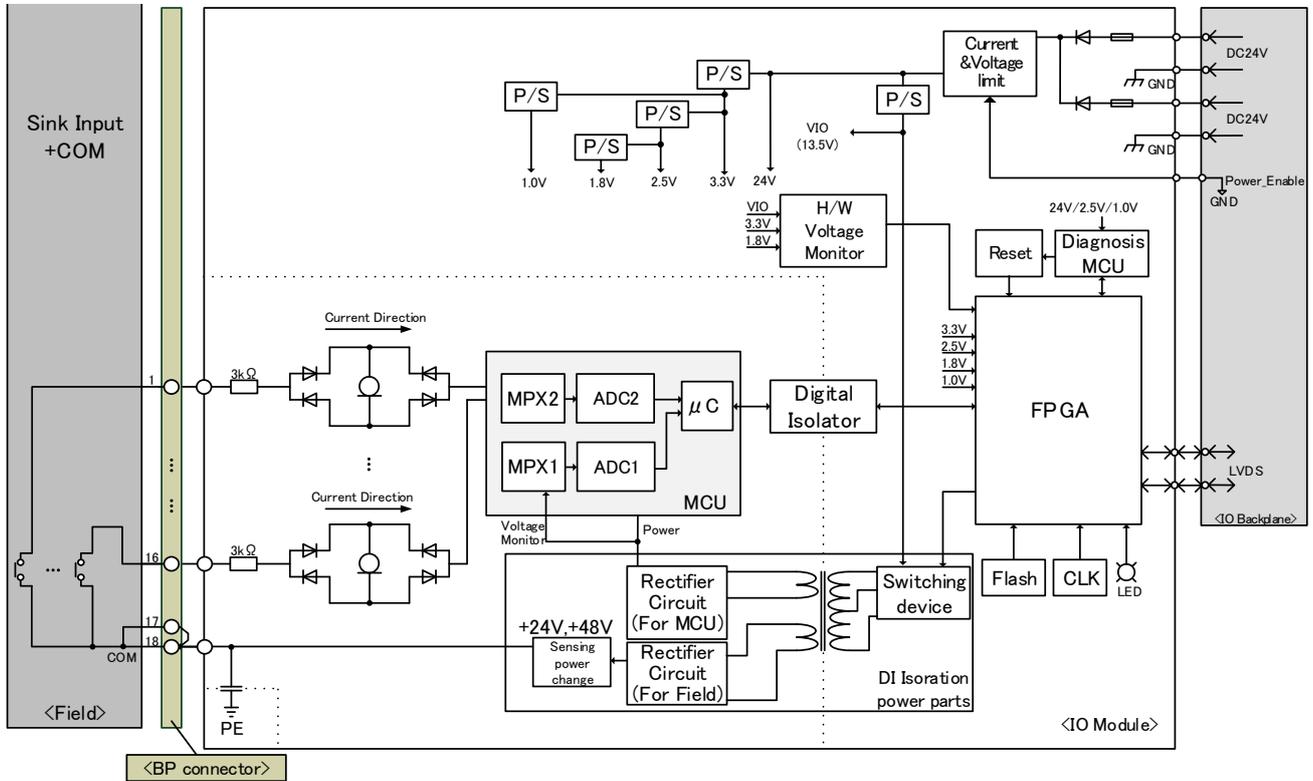
■ Specifications

| ITEM | | SPECIFICATION | |
|---------------------------|----------------------------|---|--|
| Input | Number of channels | 16 (16 ch common isolation) | |
| | Range | ON current | 2 mA or more *Selectable power for sense current: +24 V/-24 V/+48 V/-48 V |
| | | OFFcurrent | Less than 1.0 mA or less |
| | | Disconnection | Setting disconnection detection ON: 0.5 mA or less |
| Data refresh cycle | | 0.3 ms/All channels | |
| Input filter | | Software digital filter (Channel individual) | |
| Dielectric strength | | AC 1500 V Between input terminal and PE | |
| Communication with IOA | Communication method | LVDS | |
| | Communication speed | 100 Mbps | |
| Self-diagnostic functions | | Power voltage check (24 V, 3.3 V, 2.5 V, 1.8 V, 1.0 V, VIO) Clock check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Heartbeat check (FPGA-MCU, FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) CRC check (FPGA) Sense voltage/current check (MCU) MCU power check (MCU) | |
| Event DI function(EDI) | | Event DI module: 16 Event signal input: Settable by software (EMS) Time resolution: 1 msec | |
| Pulse input function(PI) | | Pulse input module: 16 Input pulse rate: 0 to 500 Hz (Both ON, OFF times shall be 0.5 msec or longer.) Count: OFF → ON, ON → OFF (2count/pulse) | |
| Detective | | Disconnection detection | |
| Protection | IO circuit Protection | Overvoltage protection | |
| | Power supply Protection | Overcurrent protection | |
| Indicator | Display LED | 4: RUN(Run) / STS(Status) / NSA(Network status A) / NSB(Network status B) | |
| | Channel status LED | 16: Each I/O channels status | |
| Isolation | | Digital isolation (Transformer insulation) | |
| Hot swap | | Possible | |
| Power supply | | DC 24 V ±20% (The voltage supplied from the backplane) | |
| Environmental conditions | Module ambient temperature | (Operating) 0 to 55°C (Storage) -40 to 85°C | |
| | Module ambient humidity | (Operating / Storage) 10 to 95% RH (No condensation) | |
| Vibration | | 3.5 mm @5 to 8.4 Hz 1 G @8.4 to 150 Hz | |
| Shock | | 15 G 11 ms | |
| Rated Current | | 251 mA | |
| Weight | | 0.13 kg | |
| Dimensions | | 62 mm (D) x 94 mm (H) x 46 mm (W) (Except projection) | |
| Standard/Directive | | EN 61131-2:2007, RoHS | |

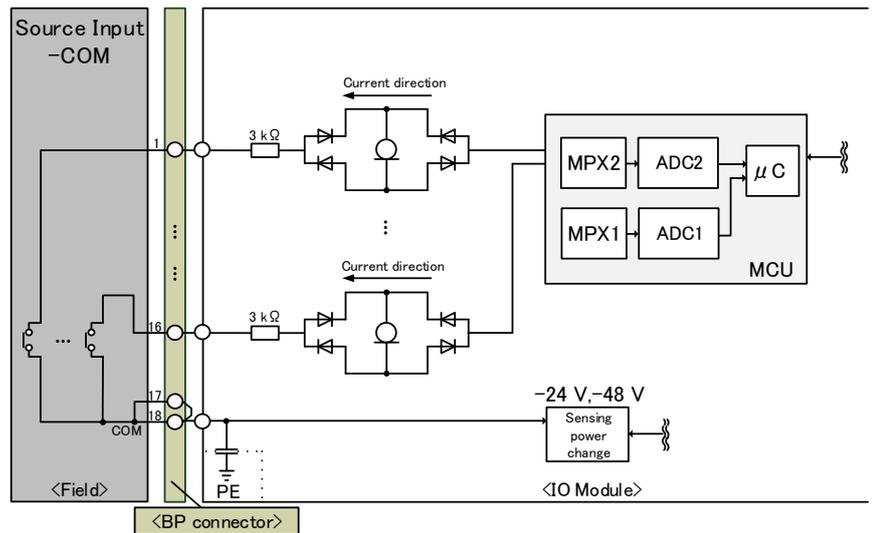
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Block diagram



- P/S : Power supply
 MPX : Multiplexer
 ADC : Analog digital converter
 μ C : Micro controller
 CLK : Clock
 FPGA : Field programmable gate array
 LED : Light emitting diode
 MCU : Micro control unit
 GND : Ground
 COM : Common
 IOA : I/O adapter
 LVDS : Low Voltage Differential Signaling
 EMS : Engineering Management System
 BP : Backplane
 PE : Protective Earth
-  : Resistor
 : Fuse
 : Diode
 : Capacitor
 : Switch
 : Transformer
 : Constant current circuit



When using, please read the instruction manual attached to the product carefully and use it properly.
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