

LSDIM01 DI module

LS communication Digital inputs : 16 2count/pulse

■ Summary



* Number of inputs : 16(16ch common isolation)

* Module ambient temperature : -5 to 60°C

* Isolation : Digital isolation

* Count : 2count/pulse

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Specifications

ITEM			SPECIFICATION
Input	Number of channels		16 (16ch common isolation)
	Range	ON current	More than 2mA * Selectable power for sense current;+24V/-24V/+48V/-48V
		OFF current	Less than 1.0mA
		Disconnection	Setting disconnection detection ON : Less than 0.5mA
Data refresh cycle			0.3ms /All channels
Input filter			Software digital filter (Channel individual)
Dielectric strength			AC1500V Between input terminal and PE
Communication with IOA	Communicaton method		LVDS
	Communication speed		100Mbps
Self-diagnostic functions			Power voltage check (24V, 3.3V, 1.2V) 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)
Pulse input function(PI)			Pulse input module:16 Input pulse rate:0 to 500Hz(On time shall be more than 0.5msec) 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
Isoration			Digital isolation
Hot swap			Possible
Power supply			DC24V ±20% (The voltage supplied from the backplane)
Environmental conditions	Module ambient temperature		(Operating) -5 to 60°C (Storage) -40 to 85°C
	Module ambient humidity		10～95% RH or less (without condensation)
Vibration			3.5mm @5 to 8.4Hz 1G @8.4 to 150Hz
Shock			15G 11ms
Current consumption			Less than 164mA
Weight			0.10kg
Dimensions			62mmD x 94mmH x 46mmW (Except projection)
Standard/Directive			IEC61131-2 : 2007, RoHS

*About compliant module type

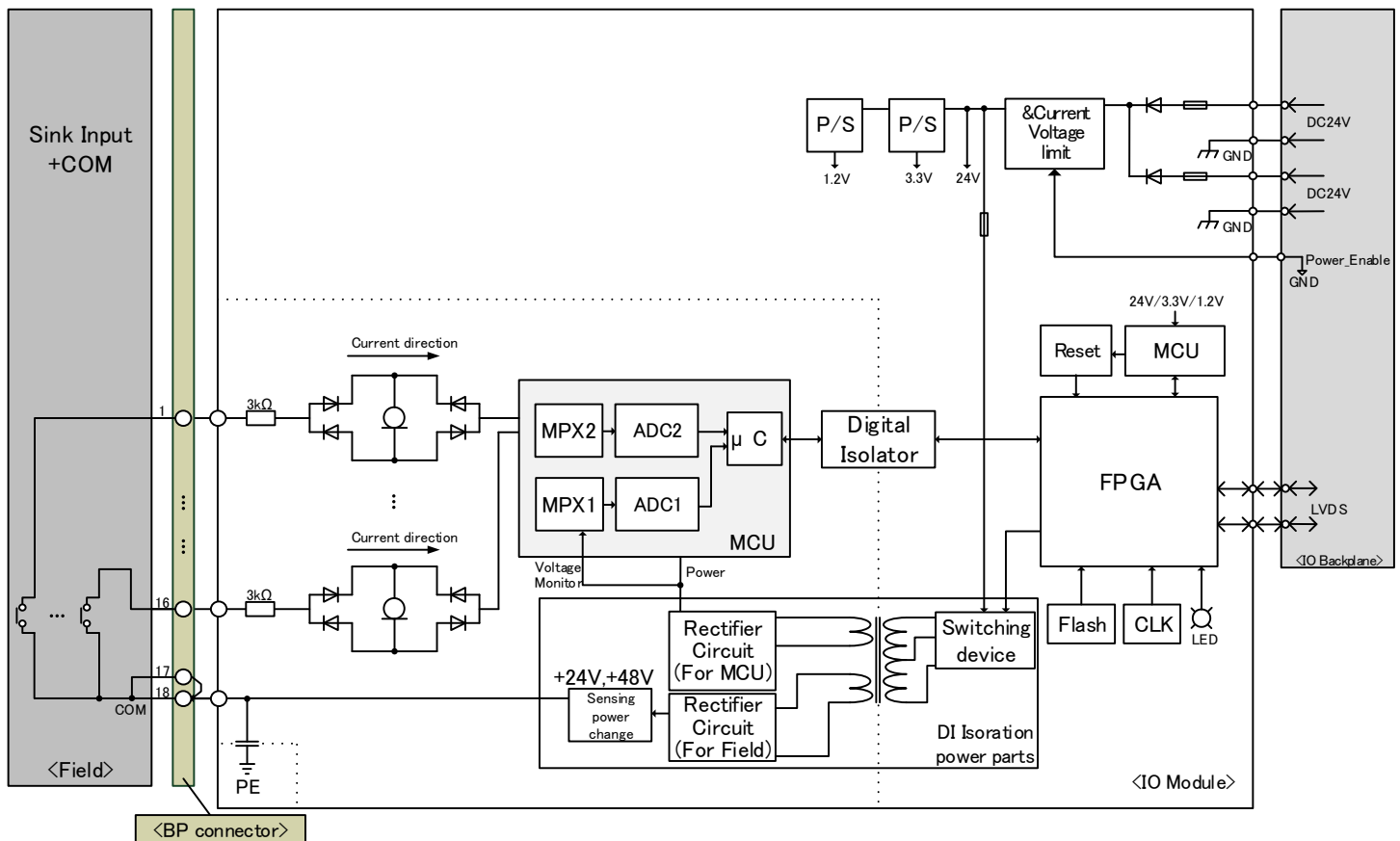
For compliant modules of this product, please refer to "Compliant backplane list (CGS-S9901-E-XX)".

For compliant modules of this product, please refer to "Compliant accessory connector list (CGS-S9902-E-XX)".

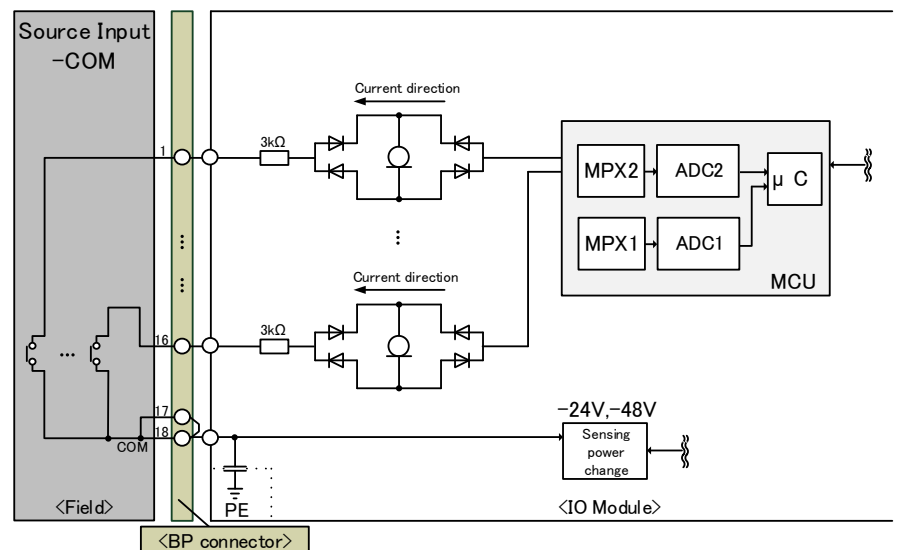
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■Block diagram



- | | | |
|------|---|------------------------------------|
| P/S | : | Power supply |
| MPX | : | Multiplexer |
| ADC | : | Analog digital converter |
| μC | : | 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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