MITSUBISHI POWER

LSDIM01 DI module

LS communication Digital inputs : 16 2count/pulse

■Summary

＊Number of inputs	:	16 (16 ch common isolation)
＊Module ambient temperature	:	-5 to 60°C
＊Isolation	:	Digital isolation
＊Count	:	2 count/pulse

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■Specifications

ITEM			SPECIFICATION
Input	Number of channels		16 (16 ch common isolation)
	Range	ON current	More than 2 mA *Selectable power for sense current: +24 V/-24 V/+48 V/-48 V
		OFFcurrent	Less than 1.0 mA
		Disconnection	Setting disconnection detection ON: Less than 0.5 mA
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	Communicaton method		LVDS
	Communication speed		100 Mbps
Self-diagnostic functions			Power voltage check (24 V, 3.3 V, 1.2 V) 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 more than 0.5 msec.) Count: OFF → ON, ON → OFF (2count/pulse)
Detective			Disconnection detection
Protection	IO circuit Protection Power supply Protection		Overvoltage 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			DC 24 V ±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		(Operating / Storage) 10 to 95% RH or less (No condensation)
Vibration			3.5 mm @5 to 8.4 Hz 1 G @8.4 to 150 Hz
Shock			15 G 11 ms
Current consumption			Less than 164 mA
Weight			0.10 kg
Dimensions			62 mm (D) x 94 mm (H) x 46 mm (W) (Except projection)
Standard/Directive			EN 61131-2:2007, RoHS

About compliant module type

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

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

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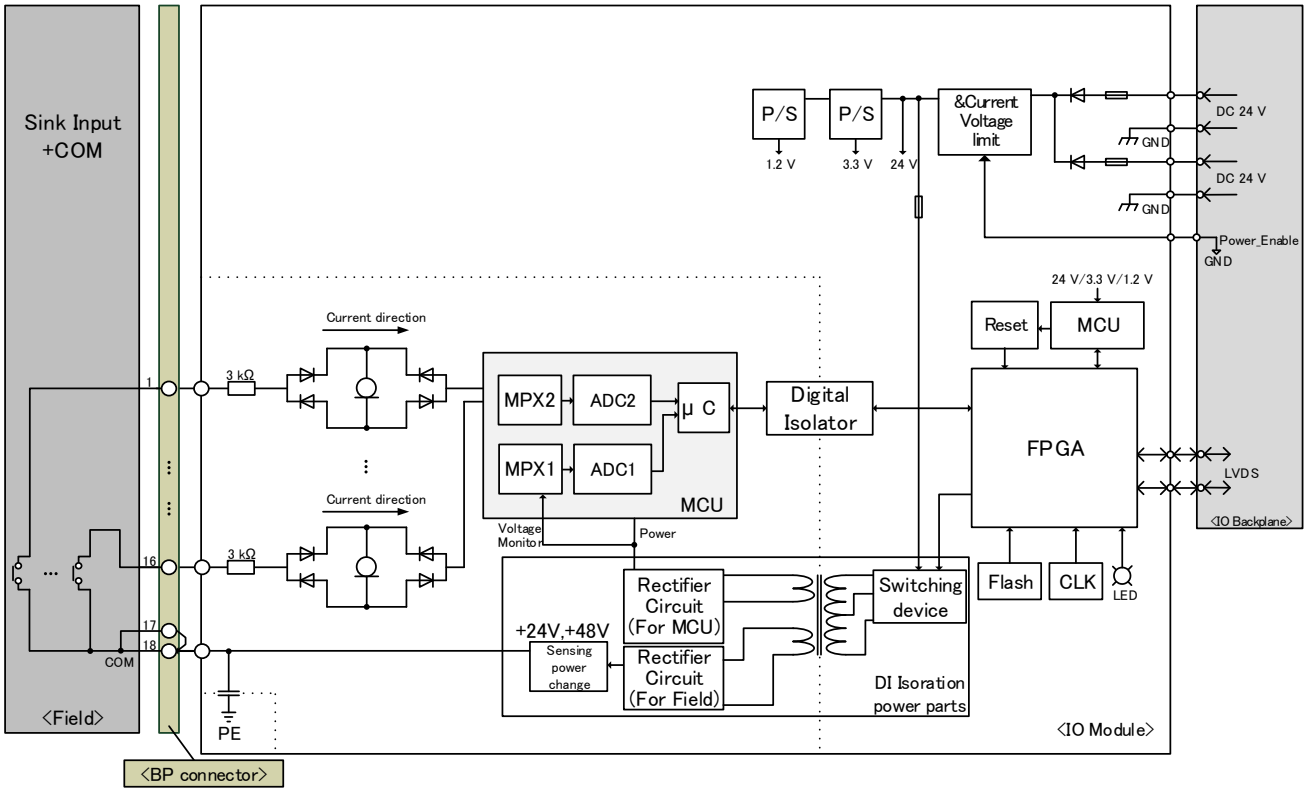
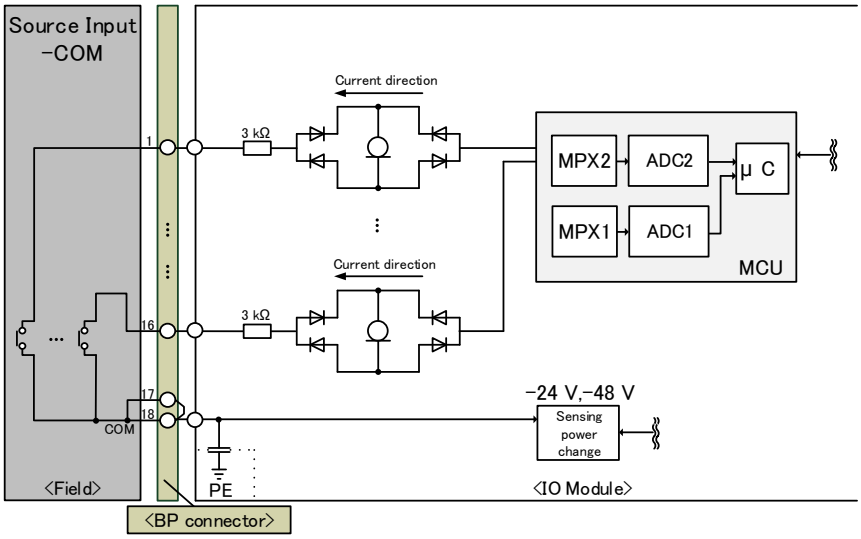
■Block diagram



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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