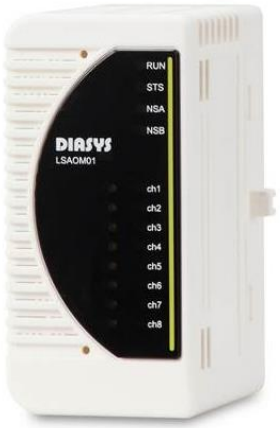
MITSUBISHI POWER

LSAOM01 AO module

LS communication Analog outputs : 8 4 to 20 mA/0 to 20 mA

■Summary



＊Number of outputs	:	8 (Channel individual isolation)
＊Output range	:	4 to 20 mA/0 to 20 mA (Selectable)
＊Resolution	:	16 bits
＊Module ambient temperature	:	-5 to 60°C
＊Isolation	:	Trans isolation

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■Specifications

ITEM		SPECIFICATION
Output	Number of channels	8 (Channel individual isolation)
	Range	4 to 20 mA/0 to 20 mA (Switchable by EMS setting) (Full Scale)
	Resolution	16 bits
	Minimum external impedance	24.9 Ω
	Maximum external impedance	750 Ω
	Switching time of the redundant configuration	2 ms
	Between terminals voltage at no load (disconnection)	Maximum 33 V
Data refresh cycle		5 ms /All channels
Operation cycle usable in DPS		10 msec or more
Absolute accuracy	@25°C	±0.1% FS
Temperature drift	@5 to 60°C	Less than ±100 ppm/°C (relative to full-scale)
Input filter		Software digital filter (Channel individual)
Dielectric strength		AC 500 V input terminal - between PE Between input channels
Communication with IOA	Communicaton method	LVDS
	Communication speed	100 Mbps
HART communication compliant Between actuators Communication specification	Communicaton method	HART communication (superimposed on 4 to 20 mA signal)
	Communication speed	1200 bps
Self-diagnostic functions		Power voltage check (24 V, 3.3 V, 1.2 V) Clock check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Read-back error check CRC check (FPGA) Tuning check
Detective		ADC abnormal check I/O signal range check (Range over, Range under) Disconnection detection (Settable of possible/none by the configuration)
Protection	(Power supply protection)	Overvoltage protection Overcurrent protection
Indicator	Display LED	4: RUN (Run)/STS (Status)/NSA (Network status A)/NSB (Network status B)
Insulation method		Transformer insulation
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) Less than 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
Current consumption		Less than 288 mA
Weight		0.11 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 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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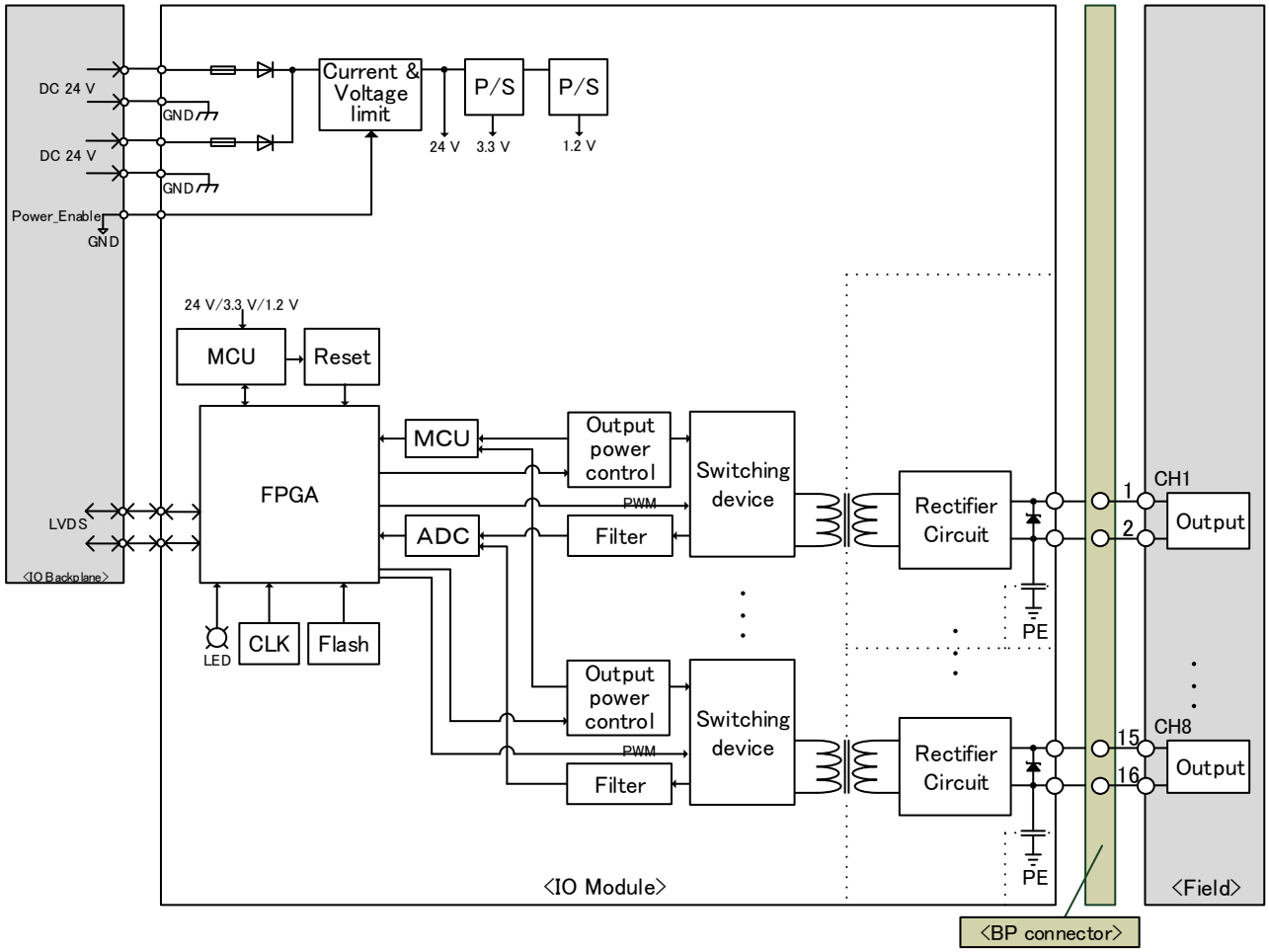
■Block diagram



P/S	:	Power supply
PWM	:	Pulse width modulation
ADC	:	Analog digital converter
CLK	:	Clock
FPGA	:	Field programmable gate array
LED	:	Light emitting diode
MCU	:	Micro control unit
GND	:	Ground
IOA	:	I/O adapter
LVDS	:	Low Voltage Differential Signaling
BP	:	Backplane
PE	:	Protective Earth
	:	Zener diode
	:	Fuse
	:	Diode
	:	Capacitor
	:	Transformer

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CGS-S5201-E-08 (2023. 06. 30)