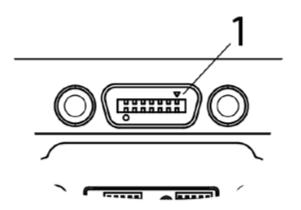
# xiD camera series, I/O description:

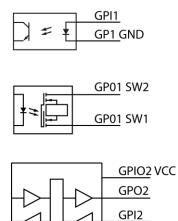
## Digital Input and Output Interface

MD features two pairs of IO ports. First one optocoupled rated for 24V systems and second insulated fast TTL. IO connector is located close to USB3.0 connector at the bottom of camera, featuring HDR-EC14 connector.



## **Connector Pin assignment**

Pin nr	Function	Note
1	Digital Output 1 pole A (GPO1)	24V logic output (relay switch)
2	Digital Output 1 pole B (GPO1)	
3	Digital Input 1 positive pole (GPI1)	24V logic input
4	Digital Input 1 negative Pole (GPI1)	24V logic input ground
5	Common Negative Pole 2 (GPI2, GPO2)	Common ground for second pair off insulated IO
6	Digital Output 2 (GPO2)	LVTTL level output
7	Isolator Aux Power GPIO2 (3.3V - 5.0V DC)	Power input for GPIO2 insulation (referenced toGPIO2 GND)
14	Digital Input 2 (GPI2)	TTL level input
8, 10, 12	AUX power input negative pole (5.0V-12.0V)	Auxiliary power input for cooling. Only cooled model.
9, 11, 13	AUX power input positive pole (5.0V-12.0V)	



## GPIO1

This pair of input and output is dedicated for 24V logic. Rated input voltage: 24V DC Insulation potential: 50V DC Over voltage category: Category II - Vpeak = 500V

GPIO2 GND

#### Input (GPI1)

insulation	Low level	Transition area	High level
Optical	< 2V	2 – 4 V	> 4V

Output (GPO1)

Output type	insulation	Max. open circuit voltage	Max. sink current	Trip current
Bidirectional solid state relay	optical	30V	100mA	140mA

## GPIO2

This pair of input and output is dedicated for fast TTL level logic systems compliant with LVTTL. Both have common pole GPIO2 GND. The high levels are influenced by GPIO2 VCC voltage which is power source for insulation circuitry in same time. Insulation is magneto resistive.

**GPIO2 VCC** 

External power supply	Input quiescent supply current
3.3V DC to 5.5V DC	4mA

Input GPI2

Logic level HIGH	Logic level LOW
2.6V – GPIO2 VCC	<0.8V

Output GPO2

GPIO2 VCC = 3.3V		GPIO2 VCC = 5V	
Logic level HIGH	Logic level LOW	Logic level HIGH	Logic level LOW
>2.5V (@lo=1mA)	<0.3V	>3.9V (@lo=1mA)	<0.5V

## **GPO** functions

Function	Description
USER	Output level is set by user software
Exposure active	Camera is exposing frame
Frame active	Camera is exposing or transferring frame
Trigger ready	Camera is ready to receive trigger
Trigger to sensor	Trigger to sensor output signal
Exposure active pulse	Short pulse (<250us) at the beginning of exposure
Busy	Camera is busy

### Connector on camera side

Connector used on camera is posibilities: 12214-8200-00FR plus 12600-S-10(3M) HDR-EA14LFYPG1 SLG(HONDA) HDR-EA14LFYPG1 SL(HONDA)

Possible also: HDR-EA14LFYPG1 SLD(HONDA) 12214-8250-00FR



## Connector on Cable side:

Possibilities of connector on cable used on cable, Selection depend on cable manufacturing process:

• HDR-E14 MAG1+



• HDR-E14-MSG1+



Housing:

• HDR-E14LPH

