



DCI-100 Specification

The DCI-100 provides an interface between DALSA Genie GigE cameras and industrial power, triggers and I/O. The module is used for remote or expandable configurations using the VA61 Vision Appliance.

Capabilities:

In remote configurations, the DCI-100 conditions industrial 24V power and triggers to the camera. If required, the camera outputs a strobe signal back to the DCI-100 for controlling lights. Image data from the camera is sent directly back to the VA61 via the GigE Ethernet link. One DCI-100 can interface up to two cameras.

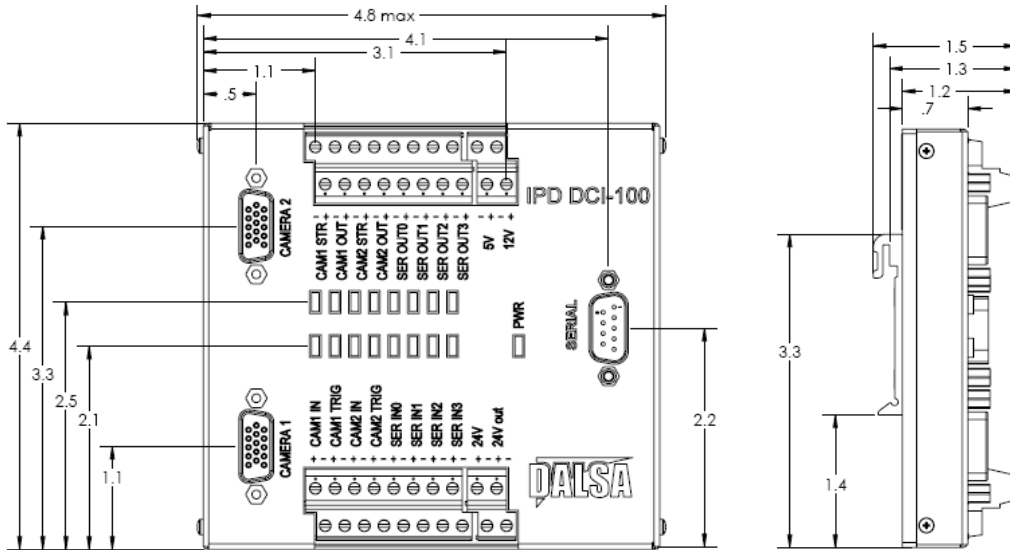
In expansion configurations, each DCI-100 can be used to interface 2 asynchronous cameras. Image data from each camera is sent indirectly to the VA61 via a multi-port Ethernet switch.

Connectors:

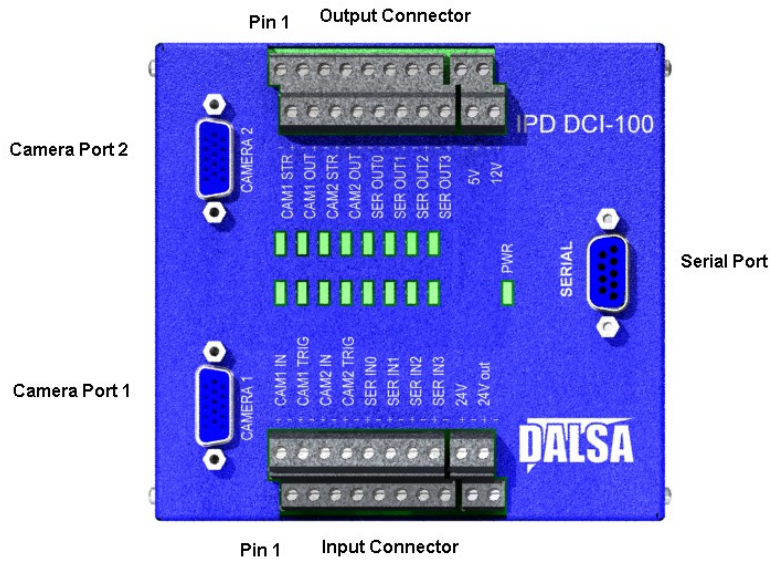
- 1x Serial (9 pin Male Female) RS232
- 2x Camera Connector
- 2x IO/PWR Connectors (Terminal block header Double stacked 5mm pitch)

Features:

- Dimensions 4.8(l) x 4.4(w) x 1.5 (d) inches
- Din Mountable
- Support for two DALSA Genie Cameras (12V 0.5A each max)
- Single Supply in (24V 1A Max)
- Serial Port Control for threshold and 4 Inputs and 4 outputs
- 8 Opto Isolated inputs
- 8 Opto Isolated Solid State Relay Outputs (300 mA 30V Max)
- User power output (5V @ 100mA and 12V @ 100mA)
- All inputs and outputs have LED indicators to determine activity.



DCI-100 Mechanical Specification



DCI-100 Front View

Connector Pin Definitions

Serial Connector: 1x Serial (9 pin Male Female) RS232

Pin	Name	Description
1,4,6,7,8,9	NC	No Connect
2	TX	RS232 Serial data Transmit
3	RX	RS232 Serial data Receive
5	GND	Signal Ground

Camera Connectors: Cam 1 and Cam 2 (15 Pin HD DSUB Female)

Pin	Name	Description
1,2,3,11	NC	No Connect
4	In 2-	Camera Input 2 - signal
5,10	GND	Power Ground
6	Out 2-	Camera outout 2 - signal
7	Out1-	Camera Out 1 - signal
8	In 1-	Camera Input 1 - signal
9	In 2+	Camera Input 2 + signal
12	Out 2+	Camera outout 2 + signal
13	Out 1+	Camera output 1 + signal
14	In 1+	Camera Input 1+ signal
15	+12V	Camera 12V Supply (0.5A) Fused

Terminal Block Input Connector

The input connector is a dual row Terminal block header. The inputs are polarity insensitive opto isolated inputs with adjustable thresholds.

(top rows are odd)

Pin	Name	Description
1,2	Cam1 in	General Purpose Input to Camera 1
3,4	Cam1 Trig/ in1	Trigger input to Camera 1
5,6	Cam2 in	General Purpose Input to Camera 2
7,8	Cam2 Trig/ in1	Trigger input to Camera 2
9,10	Ser IN 0	Input 0 for signal that can be read via RS232
11,12	Ser IN 1	Input 1 for signal that can be read via RS232
13,114	Ser IN 2	Input 2 for signal that can be read via RS232
15,16	Ser IN 3	Input 3 for signal that can be read via RS232
17	+24V IN	24V Input Power (1A Max with Camera)
18	Gnd	0 Volts
19	+24V	Connected to Pin 17
20	Gnd	Connected to Pin 18

Three threshold controls are grouped to control the various inputs. These thresholds are serially programmed.

Threshold 1	Cam 1
Threshold 2	Cam 2
Threshold 3	Serially readable inputs

Terminal Block Output Connector

The output connector provides polarity insensitive, opto isolated, solid state relay outputs that can handle voltages up to 30V and can drive up to 300mA

(top rows are even)

Pin	Name	Description
1,2	Cam1 Strobe	Strobe output from Camera 1
3,4	Cam1 Out	General Purpose output from Camera 1
5,6	Cam2 Strobe	Strobe output from Camera 2
7,8	Cam2 Out	General Purpose output from Camera 1
9,10	Ser Out 0	Output 0 that can be Controlled via RS232
11,12	Ser Out 1	Output 1 that can be Controlled via RS232
13,14	Ser Out 2	Output 2 that can be Controlled via RS232
15,16	Ser Out 3	Output 3 that can be Controlled via RS232
17	Gnd	Ground Pin
18	+5V Out	+5V Output Power for external device(100mA Max)
19	Gnd	Ground Pin
20	Gnd	+12V Output Pwr for external device (100mA Max)