PRO SERIES
I/O TECHNICAL SPECIFICATION

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MAX PHOTONICS

TECHNICAL SPECIFICATION

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PIN #	SIGNAL NAME	TYPE	FUNCTIONALITY	WIRE COLOR
1	EXLOCK_CH1B	IN	**Interlock Input (Dual Channels)** The external interlock signal from External to Laser. When the connections of "EXLOCK_CH1A"&"EXLOCK_CH1B" and "EXLOCK_CH2A"&"EXLOCK_CH2B" are good, the Laser is good to work; If either connection between "EXLOCK_CH1A" and "EXLOCK_CH1B" or "EXLOCK_CH2A" and "EXLOCK_CH2B" are breached by a door interlock or other means, Laser emission is OFF.	Blue and White
2	EXLOCK_CH1A			Blue
3	EXLOCK_CH2B			Blue
4	EXLOCK_CH2A			Blue and White
5	REMOTE_AC_KEY_B	IN	**Key Switch for External Control** "KEY_B" is Negative(-), "KEY_A" is Positive(+); when those two pins are connected, the Laser is good to work with external control signal; when disconnected, Laser Emission is OFF.	Brown and White
6	REMOTE_AC_KEY_A			Brown
7	REMOTE_DC_PWR_SW1	IN	**External Start** External control Laser Emission ON/OFF; when "SW1" and "SW2" are connected, Laser Emission is ON; when disconnected, Laser Emission is OFF.	Yellow and Black
8	REMOTE_DC_PWR_SW2			Yellow
9	AN_OUT_PWR_5V	OUT	**Monitoring of Output Power** Send Laser output power to External.	Brown and White
10	AN_PWR_PEAK_10V	IN	**0-10V Output Power Control** External 0-10V input to control Laser output power, 1V--10%, 10V--100%.	Green
11	ISO_REF_VSS	AGND	**Ground** Analog ground for Pin 9,10,12.	Green and White
12	AN_BACK_PWR_5V	OUT	**Monitoring of Back Reflected Power** Monitor and feedback the reflectivity status.	Brown
13	PWM-	IN	**PWM Input** Digital Input with PWM signal to control output power.	Black and White
14	PWM+			Black
15	ENABLE-	IN	**Enable Signal** When voltage of those two pins is High(24V), the Laser is Enabled; When voltage of those two pins is Low(0V), the Laser is Disabled.	Red and White
16	ENABLE+			Red
17	EX_RED_CONTROL-	IN	**Guide Laser ON/OFF** When voltage of those two pins is High(24V), the guide laser is ON; When voltage of those two pins is Low(0V), the guide laser is OFF.	Yellow and Black
18	EX_RED_CONTROL+			Yellow
19	EX_RESET-	IN	**Reset** When voltage of those two pins is High(24V), the RESET is triggered; When voltage of those two pins is Low(0V), NO RESET.	Green and White
20	EX_RESET+			Green
21	LASER_READY	OUT	**Laser Ready** This signal is High(24V) if the following criteria are met: ✓ Laser Power Supply is ON ; ✓ No error is present; Otherwise, the signal is Low(0V).	Black
22	ERROR/ALARM+	OUT	**Alarm** When there is no alarm, the signal is High(24V); When there is an alarm, the signal is Low(0V).	Black and White

23	LASER_EMISSION_ON	OUT	**Emission is ON** When the Emission is ON, the signal is High(24V); When the Emission is OFF, the signal is Low(0V).	Red
24	MAIN_PWR_STATE	OUT	**Main Power Status** When the key switch turns ON, the signal is High(24V); When the key switch turns OFF, the signal is Low(0V).	Red and White
25	ISO_COM	GND	**Ground** Digital Ground for Pin 21,22,23,24.	Orange
26	ISO_COM			Orange and Black
27	EMERGENCY1_INPUT-	IN	**Emergency Stop Input 1** If the two pins are connected, Laser Emission is ON, ALARM OFF; If the two pins are disconnected, Laser Emission is OFF, ALARM ON.	Orange and Black
28	EMERGENCY1_INPUT+			Orange
29	N/A	N/A	Reserved for Further Extension	Purple and Black
30	N/A			Purple
31	N/A			Light Green and Black
32	N/A			Light Green
33	EMERGENCY2_INPUT-	IN	**Emergency Stop Input 2** When the two pins are connected, Laser Emission is ON, ALARM OFF; When the two pins are disconnected, Laser Emission is OFF, ALARM ON.	Light Blue and Black
34	EMERGENCY2_INPUT+			Light Blue
35	READY_LED-	OUT	**"LASER READY" Signal to External** When the Laser is ready, the signal is High(24V), send the signal to External with the "READY" status.	Purple and Black
36	READY_LED+			Purple
37	LASER_ON_LED-	OUT	**"LASER ON" Signal to External** When Laser Emission is ON, send the signal to External with the "Emission ON" status.	Light Green and Black
38	LASER_ON_LED+			Light Green
39	OUTPUT_EMERGENCY_1A	OUT	**EMERGENCY Circuit 1 Status** Open means Emergency push button on laser is pressed; Closed means Emergency push button on laser is unpressed.	Light Blue and Black
40	OUTPUT_EMERGENCY_1B			Light Blue
41	N/A	N/A	**Reserved for Further Extension**	Blue
42	N/A	N/A	**Reserved for Further Extension**	Blue and White
43	N/A	N/A	**Reserved for Further Extension**	Yellow
44	N/A	N/A	**Reserved for Further Extension**	Yellow and Black
45	N/A	N/A	**Reserved for Further Extension**	Brown
46	OUTPUT_EMERGENCY_2A	OUT	**EMERGENCY Circuit 2 Status** Open means Emergency push button on Laser is pressed; Closed means Emergency push button on Laser is unpressed.	Brown and White
47	OUTPUT_EMERGENCY_2B			Green

Remarks: 0…+3 V = LOW, +20…+30 V = HIGH.