

Dear Valued Customer

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Digital PWM Controller with Higher Functionality

「IDGC series」 Release

Launch date: December 1, 2022

Leimac Ltd., a manufacturer of LED lighting for image processing, will release its new digital PWM controller "IDGC series" for use in image processing inspections on December 1, 2022.



The newly developed "IDGC series" is an improved version of our digital PWM controller: IDGB series.

To meet a wide variety of needs, the lineup consists of 45 types in total, including two input voltages (AC 100-240V and DC 24V), two output voltages (DC 12V and DC 24V), four rated capacities (30 W, 50 W, 100 W and 150 W (-T series only)) and three external control methods (Ethernet communication (TP), RS-232C (S2) and 8-bit parallel communication/analog 0-5 V (PV)).

-details-

1. Release products

The series can be broadly classified into three types in terms of functionality, as shown below.

- IDGC series : AC input controller for 12 V output lighting
- IDGC-24 series : AC input controller for 24 V output lighting
- IDGC-T series : DC input controller for 24 V output lighting

Please refer to Appendix 1 for the main specifications.

2. Release date

December 1, 2022

3. Model type

Please refer to Appendix_2 for the model type.

If you have any questions, please contact our sales representative.

Main Specifications

Items marked with ⊙ indicate items that differ significantly from those in the IDGB series

	IDGC series	IDGC-24 series	IDGC-T series
Drive method	Constant voltage		
Control method	PWM : approx. 125kHz 256step		
Output variable range	0 to 100% duty ratio at 125kHz output frequency in 256 steps ^{*1}		
Input Voltage	AC100-240V	AC100-240V	DC24V
Output Voltage	DC12V	DC24V	DC24V
Capacity	30W / 50W / 100W	30W / 50W / 100W	50W / 150W
⊙External control method	Select from the following methods ^{*2} TP: Ethernet communication S2: RS-232C communication PV: 8-bit parallel communication / analog 0-5V		TP: Ethernet communication
Output operation type	Level type / Edge type		
Output Time Setting	0.1~999.9ms range at 0.1ms intervals (Applicable to edge type only)		
Variable delay time range	0~9000μs range at 1μs intervals		
⊙External ON/OFF input	NPN / PNP		
External ON/OFF Responsiveness	High mode: OFF→ON: within 60μs, ON→OFF: within 10μs Low mode: OFF→ON: within 10μs, ON→OFF: within 60μs Level: Pulse output for trigger ON time		
⊙Automatic IP acquisition	Standard		
Auto MDI/MDIX	Standard		
⊙Programming Function	Standard (maximum number of trigger signals: 16) ^{*3}		
⊙Standby timeout	Standard		
Conformity Standard	CE、UKCA、PSE		

^{*1} Output power between "0~15" and "245~255" may vary.

^{*2} S2 and PV specifications are not available for 50W rated capacity products.

^{*3} Ethernet communication / RS232C communication specifications only.

IDGC series (IDGC: AC input DC 12V output specification) Model list

Capacity	Number of control channels	External Control Method		
		Ethernet communication	RS-232C communication	8-bit parallel communication / analog 0-5V
30W	2ch	IDGC-30M2-TP	IDGC-30M2-S2	IDGC-30M2-PV
	4ch	IDGC-30M4-TP	IDGC-30M4-S2	IDGC-30M4-PV
	8ch	IDGC-30M8-TP	IDGC-30M8-S2	IDGC-30M8-PV
50W	2ch	IDGC-50M2-TP	-	-
	4ch	IDGC-50M4-TP	-	-
	8ch	IDGC-50M8-TP	-	-
100W	2ch	IDGC-100M2-TP	IDGC-100M2-S2	IDGC-100M2-PV
	4ch	IDGC-100M4-TP	IDGC-100M4-S2	IDGC-100M4-PV
	8ch	IDGC-100M8-TP	IDGC-100M8-S2	IDGC-100M8-PV

IDGC series (IDGC-24: AC input DC 24V output specification) Model list

Capacity	Number of control channels	External Control Method		
		Ethernet communication	RS-232C communication	8-bit parallel communication / analog 0-5V
30W	2ch	IDGC-30M2-24-TP	IDGC-30M2-24-S2	IDGC-30M2-24-PV
	4ch	IDGC-30M4-24-TP	IDGC-30M4-24-S2	IDGC-30M4-24-PV
	8ch	IDGC-30M8-24-TP	IDGC-30M8-24-S2	IDGC-30M8-24-PV
50W	2ch	IDGC-50M2-24-TP	-	-
	4ch	IDGC-50M4-24-TP	-	-
	8ch	IDGC-50M8-24-TP	-	-
100W	2ch	IDGC-100M2-24-TP	IDGC-100M2-24-S2	IDGC-100M2-24-PV
	4ch	IDGC-100M4-24-TP	IDGC-100M4-24-S2	IDGC-100M4-24-PV
	8ch	IDGC-100M8-24-TP	IDGC-100M8-24-S2	IDGC-100M8-24-PV

IDGC series (IDGC-T: DC 24V input DC 24V output specification) Model list

Capacity	Number of control channels	External Control Method
		Ethernet communication only
50W	2ch	IDGC-50M2-24-TP-T
	4ch	-
	8ch	-
150W	2ch	-
	4ch	IDGC-150M4-24-TP-T
	8ch	IDGC-150M8-24-TP-T