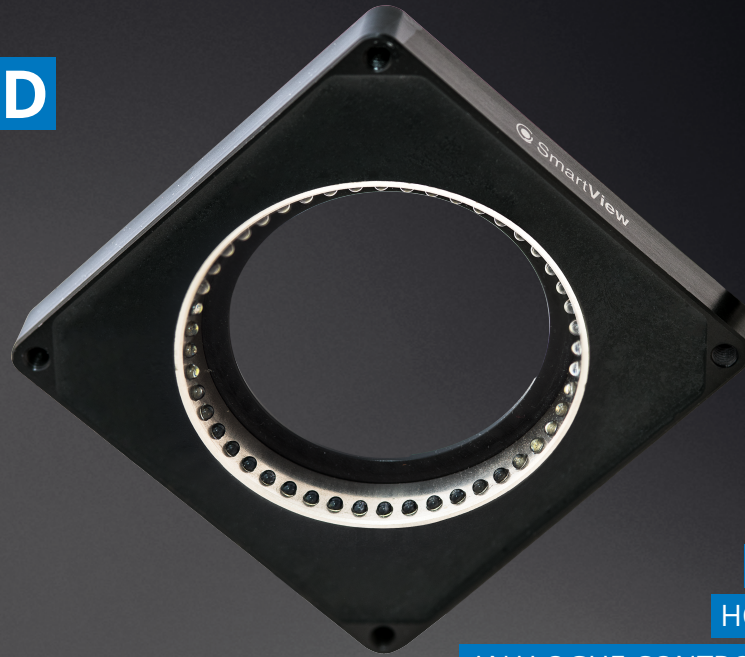


# DARK FIELD LIGHT

Designated for relief and surface illumination. Suitable for DPM texts and codes illumination.



COMPACT DESIGN

UNIVERSAL MOUNTING

ROUGH, METAL HOUSING

HOMOGENOUS LIGHT FIELD

ANALOGUE CONTROL OF LIGHTING INTENSITY

DIGITAL CONTROLLED OF STROBBING PULSES

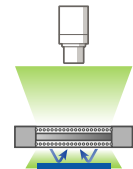
## CONFIGURATION

ordering code

DF	70	R
Dark Field light	Ø of Active Area	wavelength

model series	active illumination area	wavelength	LED radiation angle
DF-70W	70 mm	☐ CTR 5000 k	30°
DF-70R	70 mm	■ 625 nm	30°
DF-70IR	70 mm	■ 850 nm	30°
DF-70UV	70 mm	■ 365   385   400 nm	30°

## WAYS OF USE



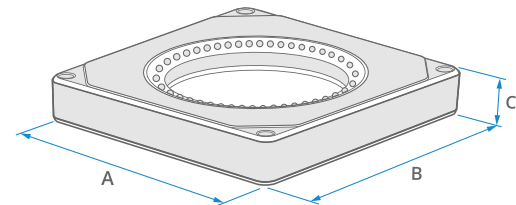
## BASIC ELECTRIC PARAMETERS

model		DF-70W	DF-70R	DF-70IR	DF-70UV
Voltage Span	$U_n$	20 - 28 V	12 - 28 V	12 - 28 V	12 - 28 V
Nominal Voltage	$U_{jm}$	24 V DC	24 V DC	24 V DC	24 V DC
Nominal Current	$I_{jm}$	340 mA			
Max. Current	$I_{max}$	500 mA			
Input	P	8,2 W			
Peak Current Strobo	$I_{pik}$	680 mA			
Peak Input Strobo	$P_{pik}$	16,3 W			
Trigger Voltage <sup>2</sup>	$U_{trig}$	$\geq 10 - 24$ V			
Trigger Current <sup>2</sup>	$I_{trig}$	2,3 mA			
Analogue Dimming <sup>2</sup>	$U_{EN}$	$\geq 2,7 .. \leq 10$ V			
PWM Dimming <sup>2</sup>	$U_{EN}$	$> 10$ V .. $\leq 24$ V <sup>1</sup>			
Strobe Voltage <sup>3</sup>	$U_{str}$	3 - 24 V			
Strobe Current <sup>3</sup>	$I_{str}$	1,9 mA			

1. PWM maximal rate is 40 kHz
2. EN (Enable) trigger signal values, (M8 3-pin connector – pin number 4)
3. Control voltage and current strobing input (STROBO) (M8 3-pin connector - pin number 2)

## DIMENSIONS AND WEIGHT

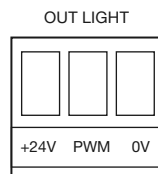
Model	A length (mm)	B width (mm)	C height (mm)	Active area	Weight
DF-70...	100	100	13,7	Ø 70 mm	370 g



## CONTROLLER CM-01

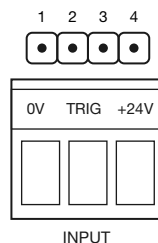
Universal illumination intensity controller

Trigger signal input



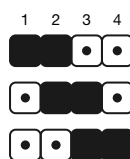
### TERMINAL BOX OUTPUT "OUT LIGHT" – LIGHT CONNECTION

Terminal +24 V light positive pole  
 Terminal PWM PWM signal  
 Terminal 0 V light negative pole



### TERMINAL BOX INPUT "INPUT" – POWER SUPPLY AND CONTROL SIGNAL CONNECTION

Terminal +24 V positive pole of 24 V DC Power Supply  
 Terminal 0 V negative pole of 24 V DC Power Supply  
 Terminal TRIG trigger signal from camera, PLC, etc.



### CM-01 MODE OPTION

1 – 2 Enable – constant light  
 2 – 3 Not used  
 1 – 2 Invert trig – light during log 0 signal



## OVERALL BASIC INFORMATION

### Technical data

IP category	IP50
Protection Category	III
Ambient temperature	-20 - +40°C
Isolation resistance	500 V
Housing material	Duralumin

## CONNECTOR PIN ASSIGNMENT



Connector M8 4-Pin	Wire color	Signal potential
1	Brown	+24 V
2	White	STROBO +24 V
3	Blue	0 V
4	Black	EN (+24 V, PWM, 0-10 V analog)