

Programmable Pattern Light Source **OPT-PCP Series NEW**



Product Features

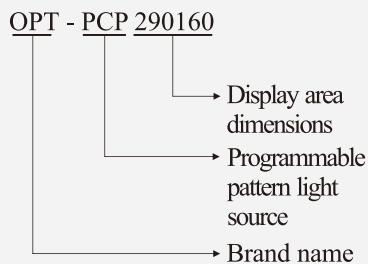
Main Features

- Can set stripe type and parameters, and edit pattern display sequence.
- Using Ethernet communication ensures stable and reliable data transmission.
- Provides multiple signal outputs, allowing synchronous connection with multiple cameras.
- High-power constant current backlighting, providing high display brightness.

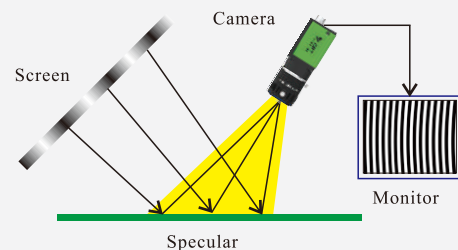
Application Cases

- Electroplated product defect detection in the furniture industry
- Appearance inspection of mobile phone shells in the 3C industry
- Defect detection in automotive body shells

Selection Guide



Series Features



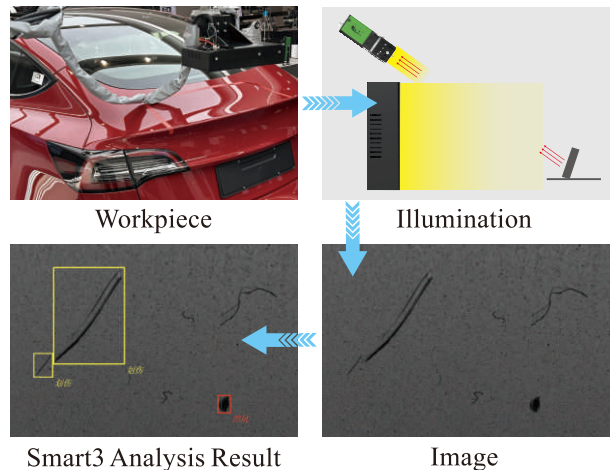
Stripe Reflection

Principle: By using stripes with a certain periodicity, the light is projected onto the measured object, causing the surface of the object to diffuse reflect and reveal the sensitivity of the mirror reflection characteristics, also known as light deflection.

- Generate binary stripes, cosine stripes, or other patterns used for optical projection phase measurement, alternating horizontally and vertically.
- Freely adjust parameters such as stripe width, image offset steps, period number, phase shift, etc., to quickly achieve image N-frame offset.
- Customize stripe colors and display sequences to achieve automated execution processes and single-step debugging.
- The stripe light source uses a pre-stored design for the process, which can effectively reduce the communication command transmission time, significantly improving control efficiency and offering superior synchronization performance.

Application Cases

- Automotive body paint defect detection.



Customizable Items

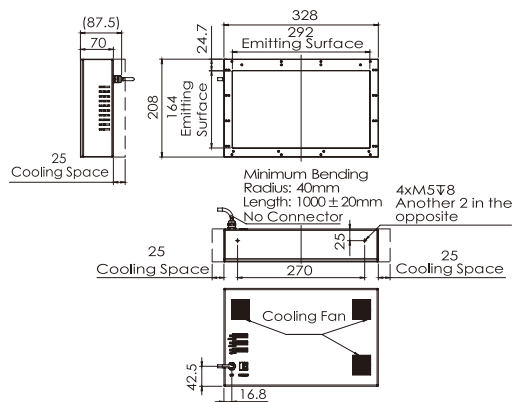


Model Table

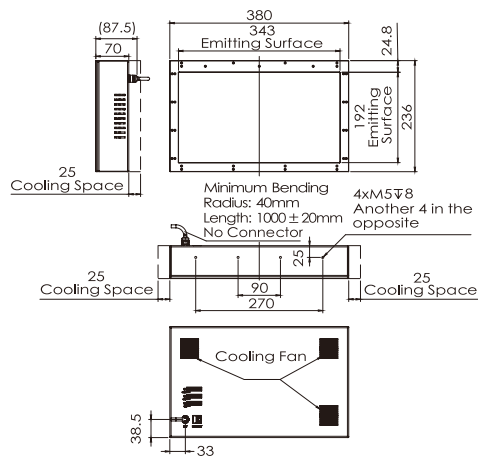
Item	Parameter			Description
Light source model	PCP290160	PCP340190	PCP530300	
Screen size	13.3 inches	15.6 inches	23.8 inches	Diagonal size
Display area dimensions(mm)	292×164	343×192	526×295	
Screen resolution	1920X1080			
Image switching rate	20Hz/S			
Pixel pitch (mm)	0.15	0.18	0.27	
Input voltage	DC24V~25.5V			
Full load power	72W	108W	252W	Under full load power, the screen temperature may be higher. It is recommended to add an external cooling device or reduce power and use triggering.
Dimensions (mm)	328×208×70	380×236×70	568×342×70	Please refer to the dimensional diagram for details.
Intensity control	256 levels			Configurable via DEMO software
Recommended power supply	SCI-PS3-300			The light source does not come with a default power supply.
Programmable trigger	Supports up to a maximum of 32 processes.			Stripe parameters and pulse width can both be adjusted.
Communication	Ethernet			
Cooling method	Fan cooling			
Illuminance range	Max≥8000Lux			Surface test values for full white screen
Binary stripes	Supports color			
Cosine stripes	Supports 255 levels of grayscale			
Hi-Pot test	DC500V 1Min			Leakage current < 5mA
Insulation	500VDC			Insulation resistance > 5MΩ
Operating temperature	0°C~50°C, Humidity: 20~85% RH (non-condensing)			
Storage ambient temperature	0°C~50°C, Humidity: 20~85% RH (non-condensing)			

Dimensions (mm)

1.OPT-PCP290160



2.OPT-PCP340190



3.OPT-PCP530300

