

# PA11 series

## DATASHEET

**Sensor Partners BV**  
James Wattlaan 15  
5151 DP Drunen  
The Netherlands  
+31 (0)416 - 37 82 39  
info@sensorpartners.com  
sensorpartners.com

**Sensor Partners BVBA**  
Z.1 Researchpark 310  
B-1731, Zellik  
Belgium  
+32 (0)2 - 464 96 90  
info@sensorpartners.com  
sensorpartners.com

## PHOTOELECTRIC AMPLIFIER SERIES

PA 11

### Description

- Operation mode and max sensing range:  
Thru-beam: 0-70 m  
Diffuse proximity: 0-5 m
- 230 V ac, 115 V ac, 24 V ac or 24 V dc supply voltage
- Manual sensitivity adjustment
- Sensor LED-drive
- Automatic sensor test
- Adjustable on/off time delay
- 1 relay and 1 transistor output or 2 transistor outputs
- Switch selectable light or dark function
- Switch selectable long or short range
- Power, output and signal level indicators
- 11-pole DIN socket connection



The PA 11 is a 1-channel photoelectric amplifier, which is to be used in conjunction with a set of remote transmitter LT and receiver LR from the series 100, 110 and 120.


This amplifier series offers manual sensitivity adjustment via integral potentiometers located on the front panel of the amplifier. Output can be selected from either a relay and NPN or NPN and PNP transistor outputs with or without a 0-10 sec on/off time delay. Light or dark function and long or short range are switch selectable.

The microprocessor controlled sensor test ensures that the system will automatically detect and indicate a faulty transmitter or receiver – cable break or electrical failure – during operation, through the relevant LED located on the front panel. The sensor LED drive powers the optional monitor LEDs available on the remote sensors – output (LT) and power (LR).

### Technical Data

Supply voltage	24 V dc, 24 V ac, 115 V ac or 230 V ac	
Voltage tolerance	+/- 15 %	
Current consumption	Max. 3,5 VA	
Output	Relay	1 open / 1 close, 250 V ac / 3 A, 120 V ac / 5 A
	Transistor	60 mA / 30 V dc
Power on indicator	Green LED	
Output indicator	Yellow LED	
Signal level indicator	Green LED	
LR sensor failure indicator	Red LED	
LT sensor failure indicator	Red LED	
Sensor monitor LED drive	The green monitor LED on the receiver indicates 'Power ON' The yellow monitor LED on the transmitter indicates 'PA 11 output activated'	
Hysteresis	Approx. 45 %	
Operation frequency	Relay	14 Hz
	Transistor	20 Hz
Response time $t_{ON} / t_{OFF}$	Relay	35 ms / 35 ms
	Transistor	25 ms / 25 ms
Delay $t_{ON} / t_{OFF}$	PA 11 A	0 – 10 sec, adjustable
Housing material	Noryl	

### Environmental Data

Temperature, operation	-10 to +50 °C
Temperature, storage	-40 to +80 °C
Sealing class	IP 40
Approvals	CE 

Available Types						
Model	Connection	Supply Voltage	24 V dc	24 V ac	115 V ac	230 V ac
		Output	Order Reference			
PA 11 A On/Off delay	11-pole DIN socket	Relay and NPN	PA 11 A 303T	PA 11 A 302T	PA 11 A 301T	PA 11 A 300T
		NPN and PNP	PA 11 A 403T	PA 11 A 402T	PA 11 A 401T	PA 11 A 400T
PA 11 B		Relay and NPN	PA 11 B 303T	PA 11 B 302T	PA 11 B 301T	PA 11 B 300T
		NPN and PNP	PA 11 B 403T	PA 11 B 402T	PA 11 B 401T	PA 11 B 400T

Note: Remote sensors and 11-pole DIN socket to be ordered separately.

Applicable Remote Sensors and Ranges		
Series	Thru-beam	Diffuse Proximity
100	18 m	1,1 m
110	40 m	2 m
120	70 m	5 m

