11.0 Specifications

Electrical: Maximum Load: Minimum Load: Maximum Off-State Leakage Current:	220-240V a.c. 50Hz 10AX 0W 20mA	
Compatible Loads:	Incandescent Loads MV Halogen Loads Iron Core LV Lighting Transformers Electronic LV Lighting Transformers Linear Fluorescent Ballasts Compact Fluorescent Loads LED Lighting Drivers HID Lamps (HPS, MH Lamps) Small Motor Loads (2A max)	
Adjustable Lux Switching Threshold: Adjustable Timer Range: Timer Accuracy: Warm-Up Time:	Approximately 20 - 500 lux Dusk til Dawn, 2H, 4H, 6H, 8H ±10% 90 seconds	
International Protection Rating:	56SS10: IP66	WDL10 : IP56
Operating Temperature Range Operating Humidity Range	0 to 45° 10 to 95% R.H.	
Safety Compliances	AS/NZS3100, AS/NZS3133, IEC60669-2-1	
EMC Compliances	AS/NZS CISPR14, CISPR15	
Specifications Typical @ 240V~ 25°C		
No User Serviceable Parts Inside		

WARNING:

> Operation outside of these specifications may result in unexpected behaviour, or even product failure.
> Timer accuracy may be affected by voltage, temperature & humidity
> Warranty may be voided when controlling any incompatible load types as determined by Schneider Electric NZ Ltd.

IMPORTANT NOTE;

All electrical installations must be carried out in accordance with local wiring rules. (AS/NZS3000 Australia and New Zealand)

PRODUCT WARRANTY 12 MONTHS

The warranty period is the earlier of, 18 months from the date of delivery or the date of receipt of the Goods or 12 months after the purchaser first places the Goods into service_ If it is not possible to determine the date of delivery, date of receipt or the date when the Goods were placed into service, the warranty period is 24 months from the date of manufacturing, as indicated on the product or using the serial number, if there is no manufacturing date_ The product warranty is subject to our full terms and conditions of sale available on www.schneider-electric.co.nz, where conditions have not been met the warranty is void.

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56Series™ IP66 SUNSET SWITCH & WDL10 SUNSET SWITCH

Installation and operating instructions for PDL Sunset Switches with selectable "Time On" Timer.

1.0 Product Range

56SS10 - 220-240V~,50Hz, 10AX, IP66 (56 Series)
WDL10 - 220-240V~,50Hz, 10AX, IP56 (Weather Protected Series)

2.0 Description

The PDL Sunset Switch Series is a range of high quality, weather protected photoelectric daylight sensors, with adjustable time & lux facilities.

The products are designed to automatically activate lighting at sunset, ensuring outside areas are illuminated after dark. Providing safety & security, the Sunset Switch product range is suitable for use in domestic, commercial & industrial installations. Typical applications include garden lighting, verandahs, car parks, street lighting, advertising signs & perimeter lighting.

3.0 Key Features

- State-of-the-art low current consumption Three Wire Design.
- Adjustable Time Setting selection.
- Adjustable Lux Setting selection.
- 10AX switch load rating.
- Suitable for a wide range of load types:
  > Incandescent (tungten filament) lamps.
  > 240V halogen / dichroic lamps.
  > Low voltage downlights using electronic transformers.
  > Low voltage downlights using iron core transformers.
  > Fluorescent lighting loads.
  > Compact fluorescent light loads.
  > LED lighting loads.
  > Small motor loads (limited to 2A)
- Suitable for new installations or retro-fit applications.
- Complies with AS/NZ and International Standards.

4.0 Operation

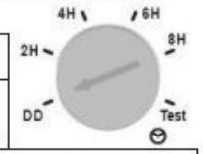
A Sunset Switch operates lighting loads automatically after dark, when the ambient light fades below a pre-determined level. Lights turn "ON" automatically at dusk and remain on until the pre-set timer period has elapsed or until dawn (whichever occurs first).

SWITCHING DELAY TIME APPROXIMATELY 90 SECONDS

5.0 Installer Adjustable Settings

5.1 Timer Setting

PDL Sunset Switches incorporate an installer adjustable Timer Setting
The load will be activated for the preset period of time. Simply set the multi postion switch to the desired setting.



Symbol	Meaning	Switching Conditions
DD	Dusk to Dawn	ON: The load will switch ON at dusk. OFF: The load will switch OFF at dawn.
2H	2 Hours	ON: The load will switch ON at dusk. OFF: The load will switch OFF after the preset time has elaspsed OR at dawn (whichever comes first).
4H	4 Hours	
6H	6 Hours	
8H	8 Hours	
Test	TEST MODE	Sets the light switching threshold to the current ambient light level. Refer to Section 6.0: Test Mode

5.2 Lux Setting

The PDL Sunset Switches incorporate an installer adjustable Lux Setting. The load will be switched according to the the ambient light threshold set.
Simply rotate the potentiometer to the desired setting.

ADJUSTABLE RANGE:	20 to 500 lux

Note: The factory default setting of approximately 20 lux will suffice for most applications

6.0 Test Mode

A special "Test Mode" has been provided to enable the installer to set the current ambient light level as the ON switching threshold (Dusk setting).

In Test Mode, the Switching Hysteresis time delay is disabled, allowing the installer to "seek" the current light level, without needing to wait for the normal switching delay time.

Step 1:	Wire up the product and connect the load. Apply power
Step 2:	Set the timer to "Test" mode.
Step 3:	Set the Lux setting to 500 lux maximum (fully clockwise). The load will be ON.
Step 4:	Wait until the ambient light level reaches the desired switching threshold. **
Step 5:	Turn the lux dial slowly anticlockwise until the load switches off.
Step 6:	Exit Test Mode by setting the desired Timer Setting (DD,2H, 4H, 6, 8H).

Note:
If you overshoot the required setting, simply return the lux dial to maximum & repeat.
** Avoid waiting for desired light level by covering the Sunset Switch with either the Test Cover or Product box supplied.

7.0 Switching Hysteresis

PDL Sunset Switches incorporate switching hysteresis, designed to ensure reliable operation of the product. Switching hysteresis is essentiallyan offset between the ON & OFF switching thresholds, making the product more immune to rapid fluctuations in the ambient lighting levels and consequently less likely to false trigger.

The switching hysteresis feature also intentionally introduces a Switching Delay Time of approximately 90 seconds.
During this time, the Sunset Switch continuously monitors the ambient light level in order to validate the transition from light to dark, or dark to light conditions.
This reduces the risk of false triggering due to momentary fluctuations in ambient light levels.

Example situations where rapid fluctuations in the ambient light level may occur;
+ Dim light due to passing cloud cover.
+ Lightning during a storm.
+ Light from the headlamps of a passing car.
+ Artificial light from the switched load.

8.0 Power-Up Sequence

When power is applied for the first time, or re-applied after a power failure / lamp replacement, the Sunset Switch will remain idle for a short period (Warm-Up Time). During this period, the load will not be turned on, even if the ambient light level is below the switching threshold.
Warm-Up Time 90 seconds approximately.

Note: If power is interrupted during an active timer period, then the timer will be restarted upon restoration of power.

9.0 Installation

The Sunset Switch may be positioned on any exterior surface facing away from any direct artificial light. Most light we see is reflected light. Accordingly, the Sunset Switch unit should be positioned so that it is NOT exposed to direct sunlight.
Prolonged exposure to an ambient temperature exceeding the specified range may degrade the performange of the product.
The Sunset Switch must be installed in such a way that artificial light (such as the load that is being switched) has no impact on the operation. If the Sunset Switch is installed too close to the load being switched, then the load may turn on & off repeatedly.
Even when operating interior lights, it is recommended that the Sunset Switch is still positioned outside. It is also suggested that the unit is positioned out of normal reach to avoid shadows & other likely sources of interference with the sensor operation.
The unit should be mounted using the gaskets supplied. If the unit is to be mounted in an exposed position, all entries to the mounting block should be sealed with a silicone sealant.

10.0 Wiring