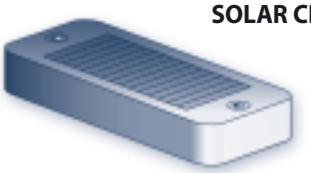
Solar Cell SCP 44

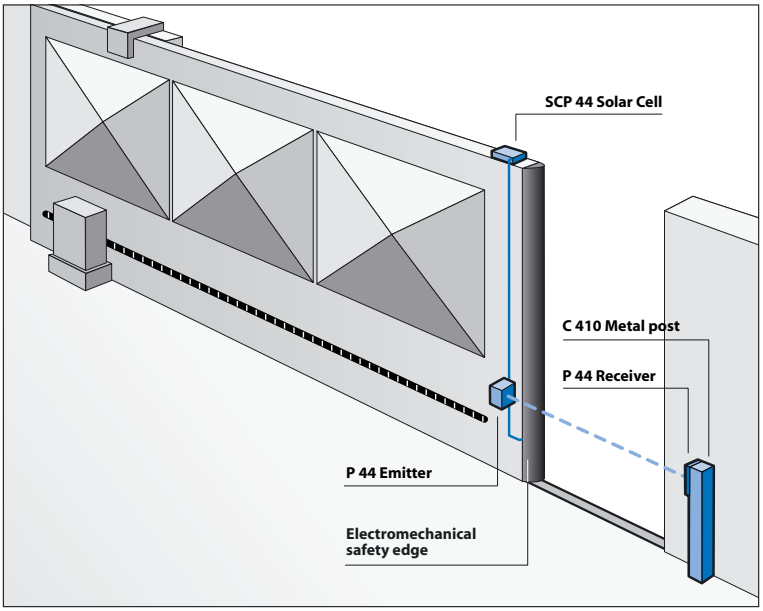
SOLAR CELL FOR PHOTOELECTRIC THRU BEAM P 44



- *9 V DC solar cell*
- *Material: transparent methacrylate*
- *Cable length: 6 m*
- *Protection degree: IP67*

SCP 44 Series

New



P44 TX AVERAGE CONSUMPTION	0,17 mA

TYPICAL VALUES REFERRED TO THE ENVIRONMENTAL TEMPERATURE (25C) VALIDS WITH A MARGIN OF 10%	ELECTRICAL DATA RELATED TO RADIATION @ 10 mW/cm²	@ 100 mW/cm²
NOMINAL POWER	2.7 mW	33.5 mW
OPEN CIRCUIT VOLTAGE	11.4 V	13,7 V
VOLTAGE AT NOMINAL POWER	8.4 V	10.0 V
SHORT CIRCUIT CURRENT	0.38 mA	3.9 mA
CURRENT AT NOMINAL POWER	0.30 mA	3.2 mA

TEMPERATURE COEFFICIENTS:	
RELATED TO THE OPEN CIRCUIT VOLTAGE	α = -0.33% / K
RELATED TO THE SHORT CIRCUIT CURRENT	β = -0.08% / K
RELATED TO THE NOMINAL POWER	γ = -0.20% / K

SPECTRUM ANSWER:	
RANGE WAVE-LENGHT	350 820 nm
MAX. EFFICIENCY WAVE-LENGHT	580 nm

APPROX. INFORMATION RELATED TO RADIATION 1 mW/cm² - 1250 Lux	mW/cm²	Lux
FULLY SUNNY DAY	120 100	150000 125000
SLIGHTLY OVERCAST SKY	100 80	125000 100000
CLOUDY SKY	80 20	100000 25000
RAIN	20 3	25000 3750

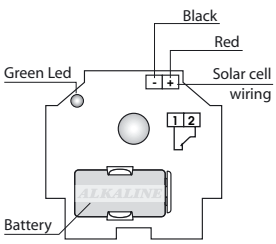
Applications for SCP 44 and P 44

INFRA developed the solar cell SCP 44 to be used together with the thru beam photoelectric sensor P 44 which has already been provided with a 9 V DC supplementary supply input for a direct connection with the solar cell.
The P 44 emitter has got also a further input to connect the protection sensitive edge; this allows the interruption information transmission (pressing) of the same "edge" through the P 44 emitter (when the edge is pressed, an electric contact on the emitter is closed and prevents the light transmission, as if there were an obstacle between the emitter and the receiver).
Therefore, if you simply install the emitter and connect it to the control station, it is possible to get the following advantages:

1) **it will not be necessary to install a supply cable for the emitter**
2) **it will not be necessary to install a cable (moving) for the sensitive edge**
3) **when installing the solar cell in a place well exposed to sunlight, the battery life can increase up to 2 years**
4) **the couple of P 44 thru beam photoelectric sensors replaces the photocells that are normally mounted first the automatic gate (in the internal part).**

Wiring diagrams P 44

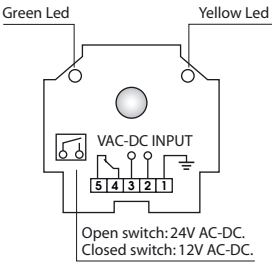
EMITTER



Connect the connectors 1 and 2 to the sensitive edge output contact to activate the beam emission.

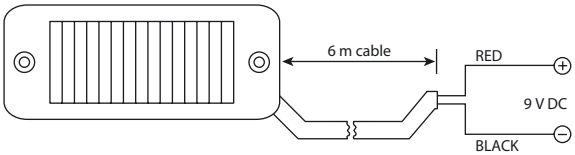
WARNING: Do not connect other supply sources to the connectors 1 and 2 or to the battery plug. The device could be irreparably damaged.

RECEIVER



Note:
Connect to ground the connector 1.

Wiring diagrams SCP 44



Warning:
do not connect any supply source to the solar cell wires.

Dimensions (mm)