

for Solar-Powered Airfield Lighting Systems



- > 2.4 GHz worldwide accepted radio control
- > 128bit security encryption
- > SHUT DOWN or turn all lights 'ON' remotely within seconds
- > Allocate lights into 'light groups', and remotely control each group
- > Set units to synchronized flashing
- > Battery recharge and PC interface connection

Typical Application



Controlling of Solar Aviation Lights

The DeWiTec radio-controlled airport lighting platform is designed to offer airports, defence, and aid agencies complete flexibility and enormous advantages over traditional airport fixtures.

The system is operated by a wireless handheld controller, which enables personnel to remotely activate and set specific characteristics of lights within their airfield.

Lights can be allocated to up to 15 'groups', such as taxiways, runway edge or threshold, and each group can be controlled independently.

The operator can switch between visible and IR for each light in the group remotely by selecting between internal LED light banks - greatly expanding the flexibility of the system.

For defence applications, models can be supplied with the ability to remotely switch between visual and infrared light output.

In addition to switching between operating colours, lights can be set to any of over 256 flash patterns, including MORSE CODE. Lights set to the same flash rate will automatically synchronize with each other to provide clear perimeter or security marking.

Using advanced proprietary software, the airfield lighting system has a large operational range. The operating range of the hand-held controller is up to 1.4km - after which one of the lights in range will relay the message to other lights in the network.

The controller and charger will be delivered in a protective Pelican case



MECHANICAL CHARACTERISTICS

Body Material Anodised aluminum

Temperature Range -40 to 80°C

OPTICAL CHARACTERISTICS

Screen LCD, Backlit

ELECTRICAL CHARACTERISTICS

Operating Voltage 7.2 V DC

Battery Capacity 4 Ah, High grade NiMH - Environmentally friendly

Radio Control
Frequency Range 2.4 GHz
Up to 1.4 km, AvMesh®

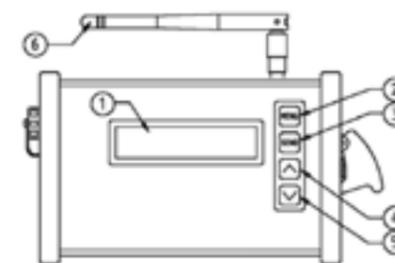
Wireless Handheld Controller

The handheld wireless controller enables personnel to remotely activate and set specific characteristics of lights within their airfield, via 128-bit encrypted RF data.

Lights may be designated into up to 15 independent groups, and then configured to specify individual light profiles such as light flash code, intensity and colour (LED banks). In addition the lights may be manually activated via the controller, or set to automatically begin operation via the internal light sensor. The straight-forward menu makes the radio-controlled airfield lighting system very easy to operate.

The lightweight unit has an operational range of up to 1.4 km and features a heavy-duty aluminium housing, LCD screen, RF aerial and 4 push buttons for parameter control. An IP67 rated charging plug enables ease of battery recharge.

- 1) LCD backlit screen
- 2 - 5) Push buttons to select and control light parameters
- 6) RF Aerial



Available Models

to be controlled:

- ✓ AV-70-RF
- ✓ AV-72-RF
- ✓ AV-425-RF
- ✓ EAGLE
- ✓ AV-HL-RF-SOL
- ✓ AV-FL-RF-SOL
- ✓ AV-OL-ILAB-12-R-D
- ✓ AV-OL-ILAB-UM-R-D
- ✓ AV-OL-ILAB-12-R Type 1
- ✓ AV-OL-ILAB-UM-R Type 2
- ✓ AV-WC-L
- ✓ AV-SIGN-20
- ✓ AV-SAL-01

Compliant to:
✓ ICAO Annex 14

for Solar-Powered Airfield Lighting Systems

RS232 Connection Interface

For connection with an external control unit or computer, the radio controller is equipped with a standard RS232 port. The integrated battery will be charged via this port.



Serial Adaptor Installation Kit

The seamless integration of radio-controlled, solar-based lights in conventionally controlled airport lighting systems can be realized via our specially-designed interface. The output is connected to the RS232 interface of the controller, the input side offers clamps for connection of potential-free contacts. The battery charger is connected with the serial interface. Standard version controls ON / OFF. Versions for controlling more functions (light groups, intensities, ...) on request.



Installation Kit Station Antenna

In special environments, such as within the turret of the tower, it may not be allowed to operate gadgets that emit radio waves (EMC). The station antenna installation kit provides the ability to shift the radio waves to the desired location.



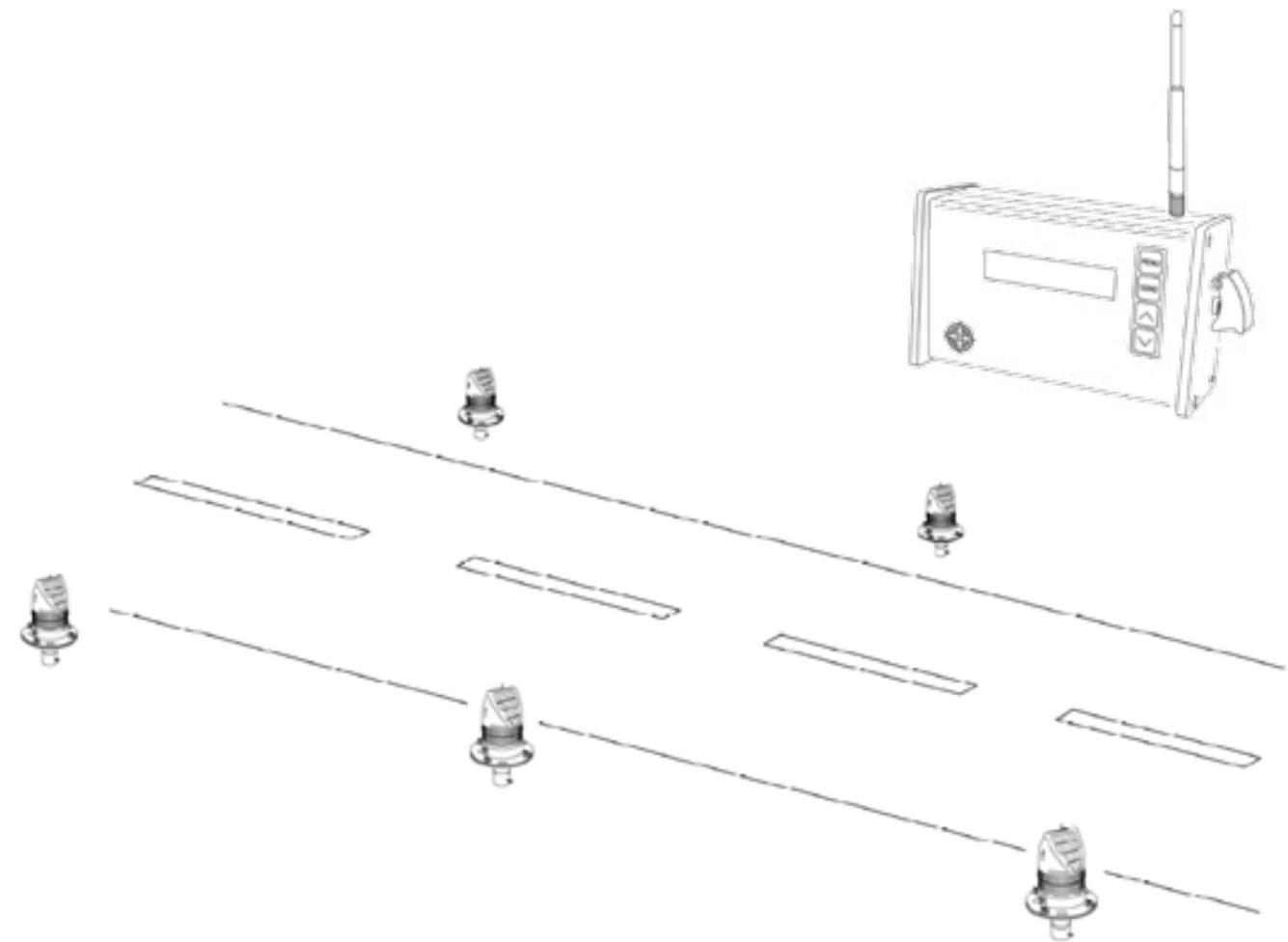
The package includes a station antenna for permanent outdoor installation as well as specialized, flexible and low-loss cable in the desired length and all necessary connectors and mounting brackets.

AvMesh® technology

The integrated AvMesh® technology is self-realizing, meaning once deployed the airfield lights will undertake a period of network mapping, whereby the system automatically determines an efficient path to relay command messages through the airfield.

AvMesh® has redundancy. Once the system has mapped an efficient relay of command messages, a secondary sub-network is mapped for added redundancy.

The lights have three selectable modes; always on, dusk-till-dawn and standby. When set to dusk-till-dawn mode, integrated sensors in the light are able to detect when the ambient light threshold drops sufficiently and the light will begin operation automatically.



PC Interface (optional)

In addition to all the features available via the wireless handheld controller, users may access their airfield lights via PC interface. All system features available from the handheld wireless controller are also available from the interface, for ease of use and accessibility.

