**PURCHASE SPECIFICATIONS FOR A SOLAR ENGINE FOR LED PAPI**

**MODEL: SE-302**

##### General Overview

S4GA Solar Engine is designed to power S4GA LED Precision Approach Path Indicator (PAPI).

**Description**

Solar Engine consists of the following components:

* Solar panel, which converts solar energy into electrical energy,
* Battery, which stores electrical energy from the solar panel,
* Energy Management System, which consists of a charge controller. The EMS charges the battery from the solar panel and uses battery energy to provide power supply,
* Chassis, which houses the above components,
* Frame for solar panel,
* Frangible Legs.

Solar Engine shall comply with minimum requirements in order to provide LED PAPI (4-box system) or A-PAPI (2-box system) with sufficient amount of energy.

* Power Output of photovoltaic panel shall not be less than 600Watt,
* Power Bank capacity shall not be less than 2640 Wh (optionally 5.280Wh),
* Shall be controlled remotely (wirelessly) via hand-held controller, control & monitoring unit or ALCMS system,
* Optionally shall allow for remote (wireless) monitoring of power bank autonomy via ALCMS,
* be able to operate in the temperature of -20° C to 50° C or better,
* be able to communicate with radio controlled equipment for not less than 1500 meters,
* be able to control by wireless mesh network or better,

Shall be equipped with inverter-converter, MultiPlus 24/300l/70 Inverter Charger.

Shall be equipped with charge controller, BlueSolar Charge Controller MPPT 100/30.