



## The SPOT: Alencon's Utility Scale DC-DC Optimizer

### Increase Energy Production, Reduce BoS Costs in Your New PV Plant



Alencon's **String Power Optimizer and Transmitter, the SPOT**, is the solution to maximizing energy production from your new PV plant. Alencon's SPOT is a complete energy harvesting system that can easily be specified and installed into a new PV plant with a central inverter. Alencon's SPOT will allow you to generate more energy from your new PV plant by offering more granular maximum power point tracking (MPPT), voltage step up to minimize conduction losses and fixed voltage to the inverter to improve DC to AC power conversion efficiency. By stepping up voltage, you'll be able to save money on cabling. Also, Alencon's SPOT can significantly reduce, if not all together eliminate, the need for combiner boxes, simplifying plant design and decreasing cost. Additionally, Alencon's SPOT is an effective operations and maintenance (O&M) tool because it allows you to isolate faults to the string level and provides continually updating performance data on your PV array. As the plant ages and its PV modules begin to degrade, Alencon's SPOT will automatically adjust to any panel mismatch issues, assuring your PV plants run as well years down the line as it did on the first day it was commissioned.

Features	Benefits	Advantages
Maximum Power Point Tracking (MPPT) on 4 Strings at once	Increase energy yield Mitigate panel mismatch issues caused by uneven soiling, cloud cover, module degradation and/or sporadic damage	More energy produced Single SPOTs offer twice the number of MPPT inputs as the next closest competitor
Boost and Fix System Voltage	Reduce conduction losses Improve the efficiency of your central inverter Reduce money by saving on cabling with thinner cables and less, overall cable length	Highest step up voltage of any PV DC-DC optimizer on the market today
Easy to install	Quick installation	Faster deployment means less installation costs Save money by reducing if not all together eliminating the need for combiners Simplify plant wiring
Galvanic Isolation	Creates complete isolation between the PV strings and a central inverter	Allows for safer isolation of arc and ground faults from the rest of the system, minimizing downtime and making O&M much easier Offers greater flexibility in interfacing to any central inverter
String Level Monitoring via the PV-IoT™	String level monitoring of PV plant performance Remote control over every string	Improved monitoring of your plant's energy production Easier O&M



## The Alencon Advantage: Full Galvanic Isolation • PV-IoT™

Alencon's SPOT is your secret weapon for assuring maximum energy production from your PV plant. The SPOT employs a great deal of proprietary technology you can only get from Alencon to assure your PV plant is producing the most possible power while making O&M more efficient and less expensive than ever before.

The Alencon SPOT is the only utility scale DC-DC optimizer that offers full galvanic isolation between each string and a

central inverter. The SPOT's galvanic isolation offers you an unparalleled level of protection from the harmful effects of faults in the PV array.

Alencon's SPOT is a wireless, internet of things (IoT) ready device, using Alencon's proprietary PV-IoT™ technology. Each SPOT in the field communicates wirelessly back to a central aggregator which allows you to monitor the performance of each string from anywhere in the world.

### Technical Specifications

INPUT	
String Operating Voltage Range	300V - 1000V
String MPPT Voltage Range	550V - 800V
Maximum String Voltage	1000V
Maximum Current	10A
Reverse Polarity Protection	
Maximum Input Power per String	6.25kW
Grounding Configuration	Positive, Negative or Ungrounded
Active Protection	ARC and Insulation Fault Protection
OUTPUT	
Nominal Voltage	600V / 1000V / 1500V / 2500V
Maximum Current	10A / 25A
Maximum Power	25kW
Reverse Polarity Protection	Reverse Diode
EFFICIENCY	
Peak Efficiency	98.6%
CEC Weighted Efficiency	98.0% Weighted
STANDARDS & COMPLIANCE	
Certifications	UL1741 / IEC 62109-1 / CSA C22.2
ENVIRONMENTAL	
Storage Temperature	-40°C to 85°C
Cooling	Natural Convection
Environmental Rating	NEMA 4 & IP 66
Humidity	0% to 95%
Operating Ambient Temperature	-40°C to 50°C
CHARACTERISTICS	
Size (H x W x D)	0.43m x 0.39m x 0.27m
Weight	27kg

Specifications subject to change without notice.



# ALECTRIS

SOLAR ASSET CARE INNOVATION, SM

[alectris.com](http://alectris.com)

V1.1707.GL.E.DS.SPOTNEW