

## STRADA Series

# Smart Off-Grid Lighting Solution for Streets & Roadway Applications

Delivers highly reliable lighting with the brightest light and maximum uptime for mission-critical lighting applications. City streets, roads, bridges, and freeways can have unparalleled:

- > Energy Forecasting & Management
- Remote Troubleshooting & Remediation

The Illumient STRADA Series of smart, solar street lights is the a complete lighting solution specifically designed to support mission-critical, street lighting applications, where the brightest light and highest reliability are required. Plus, with Illumience cloud managment software service, energy generation, storage and lighting control is fully managed for systems needing:



#### **Maximum Uptime**

Our predictive analytics, weather forecasting and individual load control enables management for maximum uptime.



#### Long Life

Our Dynamic Charging algorithm uniquely focus' on battery charging with the unpredictable nature of off-grid solar energy.



# Maintenance & Easy Installation

More than 80% of all issues are managed and eliminated through our remote management service. Installers and customers get peace of mind through our commissioning & provisioning services to ensure you get it right the first time, every time.





# STRADA Series Technical Data

System Components Overview	
Solar Panels	>300Watt, 60 cell solar panel
Batteries	140Ah Absorbent Glass Matt (AGM), thick plate, long life, deep cycle lead acid batteries
Pole	STRAD Series pole
Light	Dimmable LED light
Light Arm	3ft steel (galvanized & painted) light arm
Controller	Clear Blue's Smart Off-Grid Controller
Energy-as-a-Service (EaaS)	3 years of service included in purchase (includes Clear Blue's extended warranty)

Options	
Solar Panels	Single or Dual 315Watt or 330Watt 60 cell solar panel
Battery Options	Dual or Quad 105Ah Absorbent Glass Matt (AGM), thick plate, long life, deep cycle lead acid batteries
Light Arm	6ft steel (galvanized & painted) light arm Bishop's crook steel (galvanized & painted) light arm
Pole Height	<ul> <li>Metal: 20.5 FT, 22.0 FT, 30.5 FT, 32.0FT (additional options available)</li> <li>Concrete: 25 - 26 FT (direct bury)</li> </ul>
Pole Type	<ul> <li>Black Galvanized &amp; painted steel pole</li> <li>Direct bury concrete pole</li> <li>Tapered concrete pole</li> <li>Supplied by others (with engineering approval)</li> </ul>
IoT Options	<ul> <li>Motion sensing (integrated with controller)</li> <li>Security/CCTV cameras</li> <li>Pedestrian traffic counters</li> <li>Smart traffic management</li> <li>Air quality/pollution &amp; chemical monitoring</li> <li>Smart parking systems</li> <li>Wifi hotspots</li> <li>Sustainable energy/carbon credits</li> <li>Energy reduction &amp; optimization</li> </ul>
Additional Power Generation	300 Watt vertical axis wind turbine
Communications	Cellular for small quantity installations or, Mesh/Ethernet or Mesh/Cellular for large quantity projects



#### STRADA Technical Data

Features	
Durable in colder climates	Illumient Strada utilizes absorbent glass mat (AGM) lead acid batteries, which have been proven to be durable in Illumient installations to -40 C/F, allowing for a large footprint of installation opportunities.
Highest Power for All Environments	With the ability to increase power generation by adding solar panels and batteries when necessary, Illumient Strada provides the most robust power in the Illumient Series. This ensures mission critical installations deliver the brightest light possible.
Scalable	The flexibility of adding solar panels and batteries of Illumient Strada allows for the most scalable line within the Illumient series. Along with Illumient Strada's multiple design options, this offering ensures that power and aesthetic needs of the project are assured.
Smart Battery Charge Profile	Includes MPPT patented multi-stage charging and remote software configurable charge profile designed specifically for solar charging and adjustable using Clear Blue's dynamic charging complete with fully customizable temperature compensation.
Remote Software Update	New features delivered to all devices via remote software download on an ongoing basis as part of Clear Blue's management service, three years of which is included in upfront price.
EaaS	Service provided by Clear Blue to manage issues & protect power system components. This service combines Clear Blue's extended warranty expert power management along and smart forecasting, to ensure the most efficient power systems available.

Cloud Management & Service		
Illumience Management (Cloud Based)	Illumience Smart Off-Grid provides real-time, 24x7, remote control, management, and proactive servicing of off-grid systems. With Illumience, streetlights, security systems and Internet of Things devices can achieve unprecedented levels of reliability and performance while installation and maintenance costs are drastically reduced.	
Management Benefits	Clear Blue's predictive analytics, weather forecasting and individual load control enables management for maximum uptime. The Dynamic Charging algorithm uniquely focus' on battery charging with the unpredictable nature of off-grid solar energy.	
Service Support	Clear Blue's Illumience cloud-based software includes 7x24 monitoring, proactive maintenance, diagnostic testing and fault determination.	
Security	For full details on Clear Blue's cloud security technology, please visit www.illumient.com or contact your rep.	

Clear Blue Smart Off-Grid Controller Certifcations*	
Health & Safety	IEC/UL/CSA601010-1, CSA C22.2 No.107.1 and UL50E, TUV certified.
EMC (EUDirective 2014/30/EU)	ETSI EN301 489-1 V2.1.1 , ETSI EN 301 489-17 V3.1.1 (2017-02) & ETSI EN 301 489-52 V1.1.0

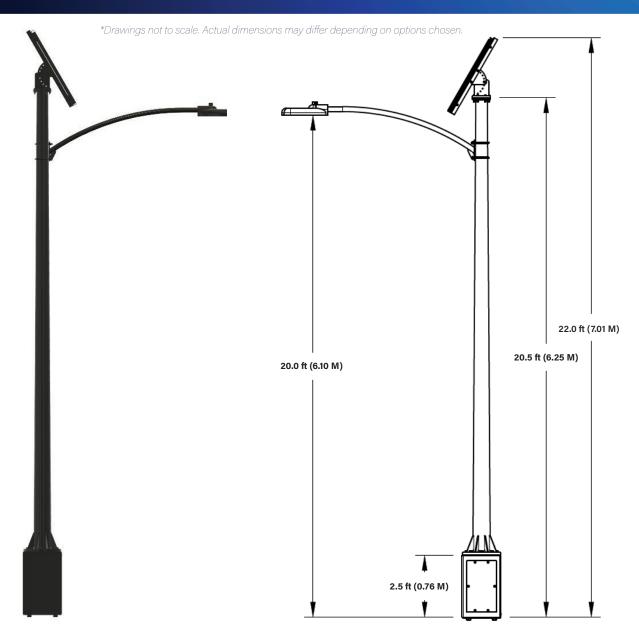
Warranty	
Warranty	Extended (3 year) warranty on power components is included as part of the EaaS service contract.

<sup>\*</sup>Other components adhere to their individual manufactures certifications. Please consult your sales representative if you have questions about the certifications of other components such as batteries, lights, poles or solar panels.



### STRADA

### **Dimensional Drawings**



Physical & Environmental	
Dimensions (Max height of the pole with solar panel)	23.1ft (single solar, dual battery) 24.6ft (dual solar, dual battery) 26.1ft (dual solar, quad battery) 24ft (wind turbine, dual battery)
Weigh (max)	4950 lbs (2240kgs)
Battery Charging Temperature	-4°F to 122°F (-20°C to 50°C)

95-12-01-001 R.A.