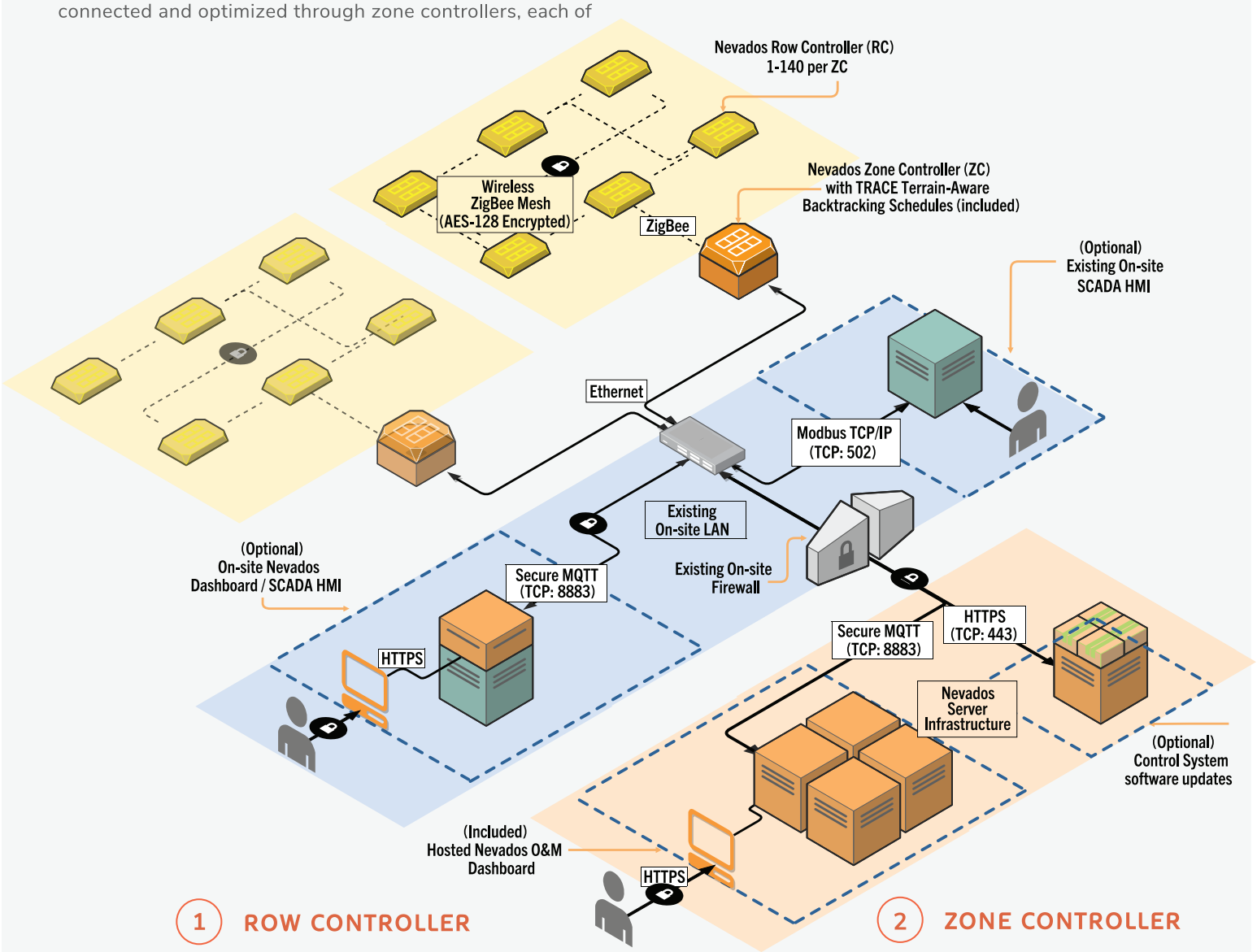
NEVADOS

SOLAR TRACKER CONTROLS

FOR ALL TERRAIN ENVIRONMENTS

The Nevados control system is designed to optimize power generation from your project site and account for variable shadow fall on flat, sloped, and rolling terrain. Each row is monitored by a single row controller. Row controllers are connected and optimized through zone controllers, each of which can manage up to 140 row controllers. The system provides detailed operational information from each row, which can be utilized to increase row-to-row efficiency and maximize output.



1 ROW CONTROLLER

- Configurable for most environments
- IP65

2 ZONE CONTROLLER

- O&M reporting
- IP65

MODULES | ROW CONTROLLER | ZONE CONTROLLER | WEATHER STATION | DASHBOARD

NEVADOS
ALL TERRAIN TRACKER

BECAUSE THE WORLD IS NOT FLAT

COMMUNICATIONS	ROW CONTROLLER	ZONE CONTROLLER
WIRELESS	• High-powered ZigBee (with external antenna) between RC and ZC	• ZigBee communication to manage RC
WIRED	• Optional RS 485 communication link	• Manage with SCADA over Modbus • Reporting to cloud-hosted monitoring & control dashboard • Cat5/6 between ZC and SCADA
ENCLOSURE		
SIZE (LxWxD)	• 10” x 12” x 3.5” – max external dimension of enclosure (not including mounting tabs)	• 13” x 15” x 5”
DESIGN	• IP 65, Plastic (injection molded), Membrane vent (Amphenol BJ001, Gore Vent, or similar)	• Reinforced polyester compression molded fiberglass
SERVICE/ACCESS	• Access battery field serviceable	
MOUNTING	• Direct mount RC to torque tube solar module • Mount aux module to torque tube using standard module clips	• IP65 rated • Mounted near or on inverter skid, or other ethernet and power access point.
POWER	• Auxiliary solar module, 40W and 30V, approx 645mm x 345mm x 25mm	• 120V AC wired to enclosure • Optional 270V
BATTERY	• 3-6Ah LiFEPO4 battery with optional cold weather package	
INPUTS	• RS485 port w. Weather cap • E-Stop • Status LED (optional) • Auxiliary module power cables	• 120V AC • Ethernet
OUTPUTS	• Motor Cable with screw-on connector to motor • External ZigBee Co-ax connector for antenna wire	• External ZigBee co-ax connector for antenna wire
BOARD COMPONENTS	• XBee RR • PTC (automotive style fuse) • Motor over-current monitoring and protection • 16bit Microcontroller @ >8MHz • Accelerometer	• Xbee S2C, S2C Pro or 3°ø

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