



AE Remote PV Tie (RPT™) Accessory

Field-proven accessory that lowers home run conductor costs for commercial and utility-scale projects

The greater the distance between the array and inverters, the higher the project cost and the higher the DC cable losses. You can reduce the levelized cost of energy (LCOE) with an Advanced Energy Remote PV Tie (RPT) by connecting the neutrals of the arrays in the field and eliminating expensive, long length and large diameter wires of the neutral DC home run legs and required conduit. The positive and negative hot wires connect the arrays to the AE inverter and the RPT puts the neutrals in series at the array. When installed with AE NX inverters, the RPT accessory reduces the distance of DC transmission current over conventional 600 VDC distribution. Furthermore, having fewer jobs to perform during site construction helps ensure on-time startup.

Achieve Higher Efficiency

During operation, conventional PV installations expend approximately 2% of energy production in resistive wiring losses alone. Using one or more RPT accessories in the center of the array will cut DC losses. This enables the inverter to be placed in a position to reduce the AC wiring losses. The result is a higher total system efficiency that can create an opportunity to use fewer modules in your system.

The robust, stainless steel, outdoor-ready design is used in a variety of environments from the high desert mountains to the Pacific tropics and reliably runs day in and day out with NEMA 3R construction.



The AE RPT is backed with a complete 5-year warranty coverage ensuring there are no surprises during the warranty period. Plus, you have the peace of mind of being backed by AE's legendary service and support.

Lower Operational LCOE

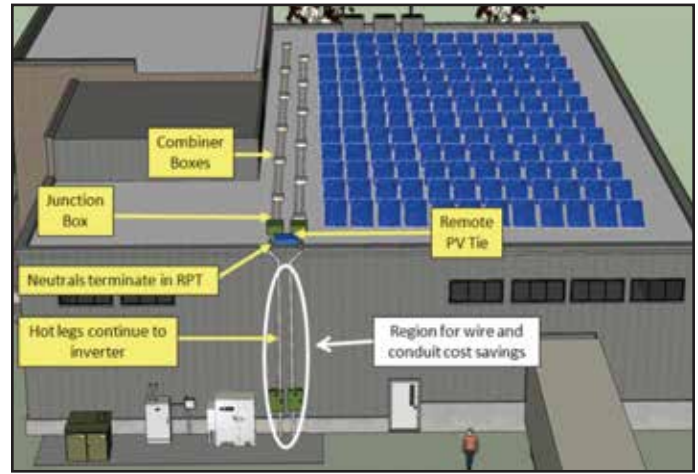
- Achieve high system efficiency with lower DC wiring losses
- Reduce voltage drop in DC wiring

Reduce BoS Component of LCOE

- Cut neutral home run conductor costs
- Reduce installation labor

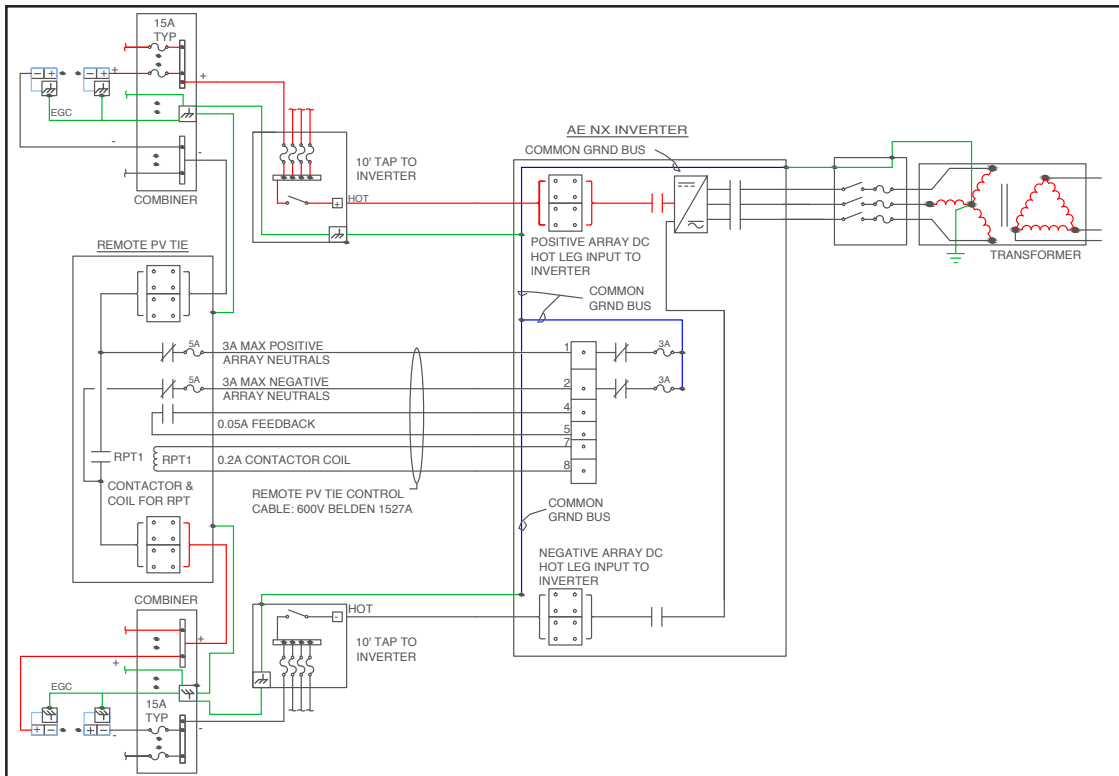
With the AE RPT™ accessory, you reduce BoS material costs and increase the potential for higher plant efficiency.

Example PV System Installation with 500' (152 m) Between the PV Arrays and the AE NX Inverter *		
	Conventional Inverter Installation	Installation with AE RPT Accessory
Wiring Costs	500' of large diameter neutral wire = \$12,000	500' of 16 AWG wire = \$250
Efficiency Gain (Due to Reduction in Resistive Wiring Losses, (I ²)R Loss)	0% efficiency gain	+2% additional efficiency or fewer panels required
Physical		
Dimensions	24" (H) x 24" (W) x 12" (D)	
	61 cm (H) x 61 cm (W) x 30.5 cm (D)	
Weight	90 lb (41.8 kg) unit weight	
Construction	Stainless steel, outdoor-ready cabinet design	
Environmental	NEMA 3R, Minimum mounting height 24"	
DC Input Power Connections	4 x 500 MCM per polarity (standard) 6 x 350 MCM + (3) 4/0 per polarity (optional) 16 x 2/0 per polarity (optional) M10 grounding studs	
Max MPP Current	500 A @ 333 kW	
	750 A @ 500 kW	
Max Distance Between RPT and AE NX Inverter	2000' (609.6 m)	
Control Wire	6 conductor, 600 V rated cable, Belden 1527A or equivalent recommended (customer supplied)	
Environmental		
Operating Ambient Temp Range	-40 °F to 122 °F (-40 °C to 50 °C)	
Regulatory		
Agency Approvals / Regulatory Compliance	NRTL certification to UL 1741-2010 by CSA International as an accessory to NX inverters	



Significant savings can be realized by using the Remote PV Tie (RPT) accessory with AE NX inverters and separable dual arrays. The RPT reduces the heavy gauge home run wiring between the array and the inverter, reducing material and labor costs for the installation. The savings depend on the distance between the array and the inverter; the greater the distance, the greater the savings that can be realized.

*Specifications are subject to change without notice. Refer to user manual for detailed specification.



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