

## POWER IQ VOLT-PRO

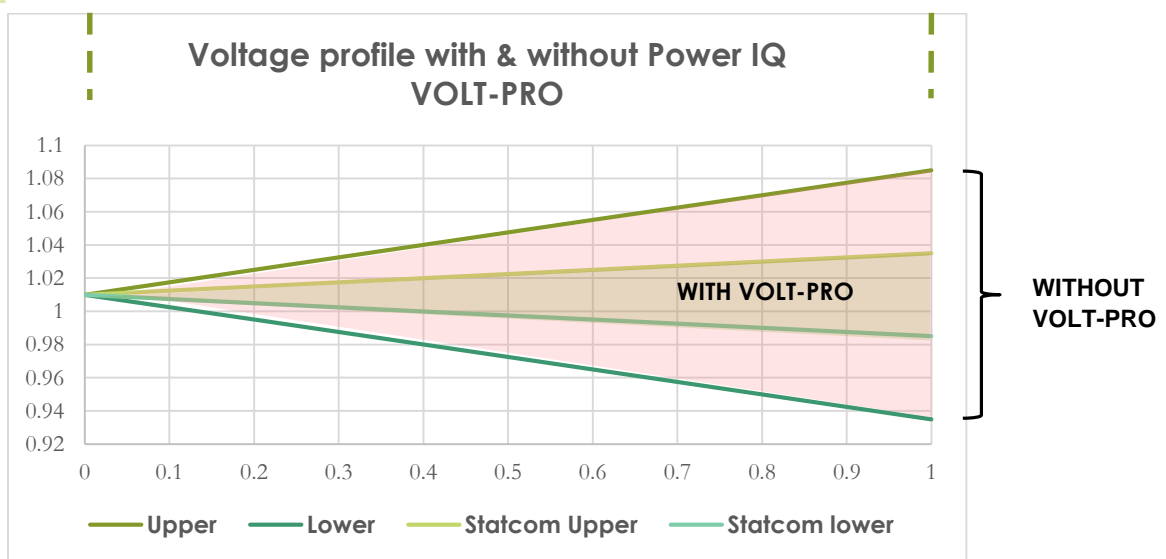
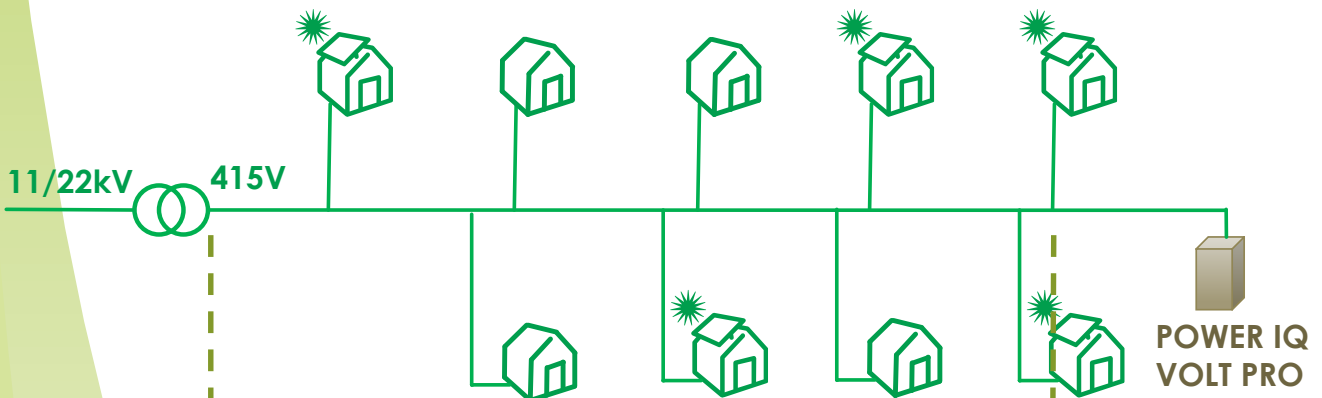


The Power IQ Volt Pro is a Low Voltage STATic COMPensator (STATCOM) that helps utilities manage the voltage on LV Networks.

When the voltage is high (typically when PV output is high and loads are low) the Volt Pro sinks inductive reactive power to reduce the voltage.

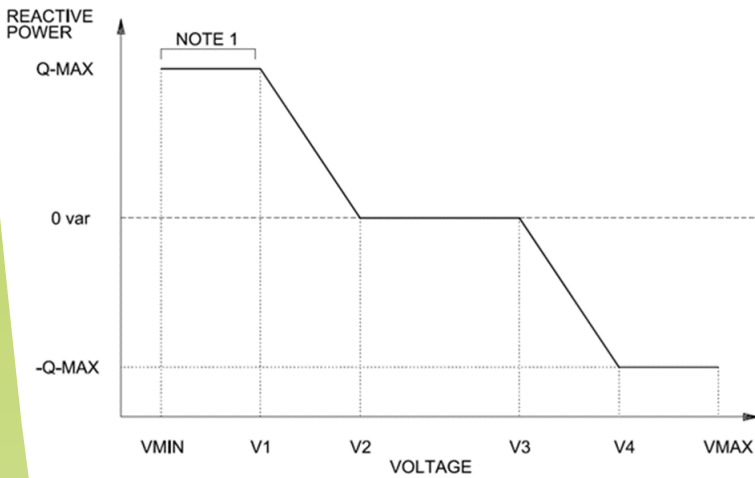
When the voltage is low (typically during peak load periods) the Volt Pro sources capacitive reactive power to boost the voltage.

Thus the LV network voltage profile is flattened and the voltage swing reduced.



Note: Voltage improvement achieved depends on network inductance.

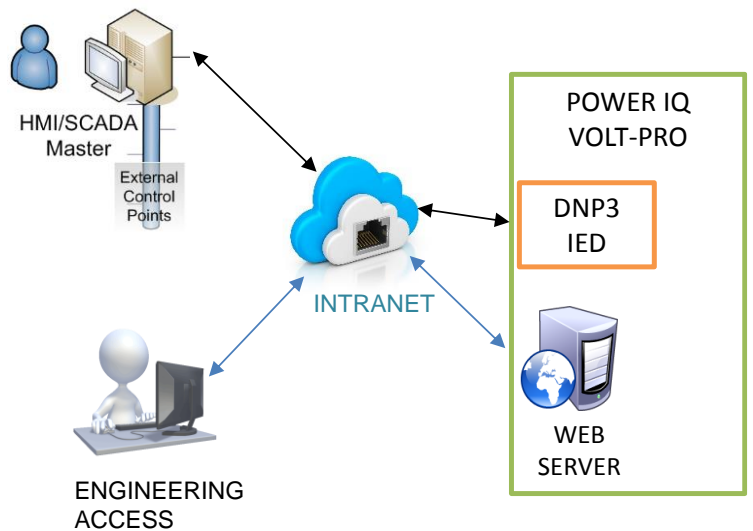
## VOLT-PRO FUNCTIONAL HIGHLIGHTS



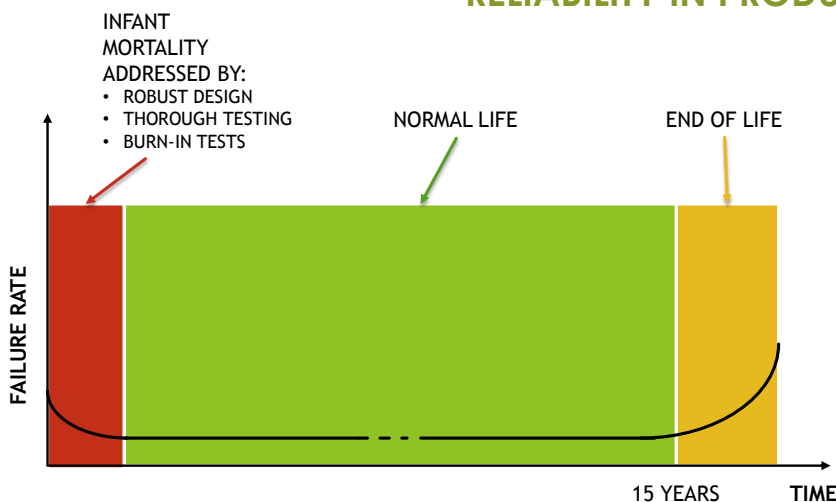
- Steady state droop control as per IEC61850-90-7 with controlled dynamic response results in stable performance and ability to parallel multiple units.
- Precise current control enabled by high output switching frequency of 48kHz.
- Precise harmonics compensation and AFLC blocking.
- Ultra low loss power electronics design achieves > 98.5% efficiency (losses half that of standard power converters).
- On-board Linux computer provides unmatched flexibility. Custom Apps can easily be added to suit customers' requirements.

## DATA LOGGING AND MANAGEMENT

- Extensive data logging with 4GB of on-board storage.
- Remote download with smart data manager.
- DNP3 communications protocol supported for communication with utility SCADA system.
- Web server based engineering access tool for configuration and management.

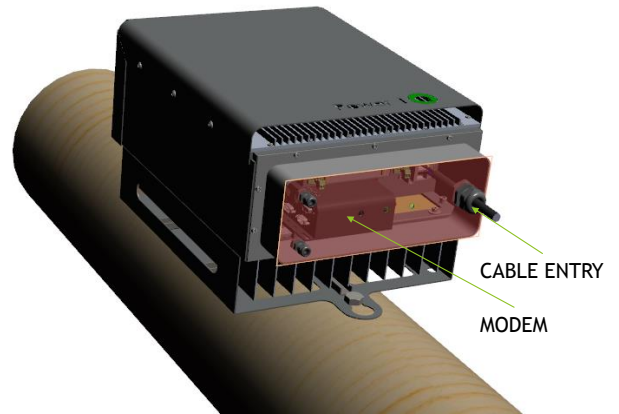
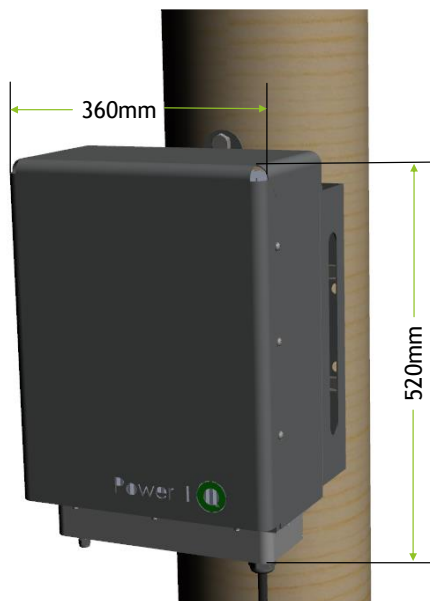


## RELIABILITY IN PRODUCT DNA



- Reliability designed in from start.
- No fans or moving parts.
- 15 year design life
- Top quality componentry.
- Thorough testing.
- Production control.
- Burn-in tests.

## SIMPLE INSTALLATION & POLE MOUNTING ARRANGEMENT



Bottom view without gland plate

## TECHNICAL SPECIFICATIONS

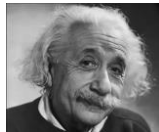
MODEL	10kVA Single Phase	30kVA Three Phase
Operating Voltage Range	200 - 270V	346 - 468V
Nominal frequency	50/60Hz (programmable)	
Continuous Rating	10kVA	30kVA
Ambient temperature	-15°C to 50°C	
Maximum Solar Loading	1100 W/m <sup>2</sup>	
Cooling	Passive (Fan-less)	
Efficiency	98.50%	
Harmonics	<3% at full load	
AFLC blocking	Programmable frequency bands	
Output switching frequency	48kHz	
Audible noise	<50dBA at 10m	
Communications	Ethernet interface to Cellular Modem DNP3 protocol supported	
Anti-islanding	Passive and Active as per AS/NZS 4777	
Mechanical Protection	IP65	
Mounting	Pole mounted	
Dimensions (H x W x D mm)	520 x 360 x 275	520 x 1080 x 275
Weight	40kg	120kg
Standards Compliance	AS/NZS 4777, EN 50178: 1998, AS/NZS 61000.3.5, AS/NZS 61000.3.12, AS/NZS 60529:2004	

## INDUSTRY LEADING POWER ELECTRONICS DESIGN

Power IQ Pty Ltd was established to provide high quality, reliable and cost effective power electronics solutions to the electricity utility industry. Its founders bring together industry leading expertise and experience in power electronics, software and power systems design having spent many years in senior R&D positions for major multinational companies. We merge the design quality and discipline of a multinational with the flexibility and agility of a technology company.

We believe that power electronics based devices will help to transform the electricity grid into a flexible, intelligent and sustainable system able to provide lower cost, more environmentally friendly power services to consumers.

Power IQ Pty Ltd is based in Brisbane, Australia and is 100% privately held. Our motto of "Simply Smart Power Solutions" derives from our aim to merge smart design with simplicity.



*"Everything should be made as simple as possible,  
but no simpler" Albert Einstein*

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