

INVERTERS

ABB

The PVS980 from ABB is a 1500VDC rated utility-scale solar inverter with a maximum power capacity of 2.2MVA. This inverter comes with a proprietary self-contained, no-maintenance cooling system designed for demanding applications and harsh environments, cutting maintenance costs while ensuring outstanding endurance and reliability, says the company.

<http://new.abb.com>



ALENCON

Alencon's Grid Inverter Package (GrIP) module PV central inverters employ a patented harmonic neutralization approach that sets a new standard in terms of size, cost, performance, and reliability, including 99.5 percent efficiency, says the company. GrIPs are paired with Alencon's DC-DC optimizers to maximize energy yield with minimal line losses.

www.alenconsystems.com



APSYSTEMS

The new YC500i with EnergyMax microinverter from APsystems offers 548W peak output to accommodate today's high-output PV modules in power and performance, says the company. With



trunk cable connectivity and internal ground, the YC500i is built on the same proven Field Programmable Gate Array (FPGA) chip topology that underpins APsystems' highly successful solar microinverter line.

www.APsystems.com

CYBOENERGY

The On/Off-Grid CyboInverter from CyboEnergy has an on-grid output and an off-grid output port. Each inverter has four input channels that can connect to solar, wind, or battery and produce 1.2 KW AC power. Each channel has its own MPPT to eliminate partial shading. When the grid is down, it will switch to off-grid mode to power critical loads.

www.cyboenergy.com



DARFON

Darfon's G320 microinverter packs power, flexibility, and reliability. It handles 60-cell or 72-cell modules with a power rating of up to 350W and features a redundancy capacitor design that continues working even if some of the electrolytic capacitors have problems over time. With four voltage options, the Darfon G320 can be installed in residential, commercial, or utility applications.

www.darfonsolar.com



EATON

Eaton's new higher-power models (2,000 kW and 2,200 kW) of its Power Xpert solar inverters provide some of the highest power ratings for grid-tied, utility-scale projects. Eaton scaled up the size of its inverter platform to provide customers with an even more cost-effective solution for large-scale projects. The Eaton solar inverter technol-

ogy yields best-in-class leveled cost of energy (LCOE) and has an industry leading 98.5 percent efficiency by the California Energy Commission (CEC). The solar inverters are designed and tested to meet the Underwriters Laboratories (UL) 1741 standard, are outdoor-rated, and feature a wide Maximum Power Point Tracking (MPPT) voltage range.

www.eaton.com



ENPHASE ENERGY

The Enphase Microinverter System offers more energy, smarter insights, and easier installation, says the company. Microinverters harvest more energy from solar panels, and high reliability standards ensure fewer maintenance hassles down the road. Streamlined accessories make installations simpler and faster, saving time and money. Real-time, panel-level monitoring makes it easy to manage an entire fleet from a computer or mobile device, while remote diagnostics and troubleshooting mean faster repairs and fewer costly truck rolls, says Enphase.

www.enphase.com



FRONIUS

The Fronius SnapINverter line offers integrated Wi-Fi and SunSpec Modbus interfaces, NEMA 4X rating, wide voltage windows, multiple MPP trackers, and easy instal-



lation in 15 minutes or less, says the company. With the identical look and feel, the Fronius SnapINverters reduce the cost of training and servicing. Power classes range from 1.5 to 24.0 kW.

www.fronius.com

HIQ SOLAR

The company's NEMA6 3-phase string inverter is said to be a rugged problem-solver. Have a difficult roof layout? Unequal strings are no problem. Harsh conditions? It's sealed and ready. A retrofit with no mounting space or a carport with difficult aesthetic restrictions? Tuck it under the array out of sight. Customers can choose either the award-winning 480V or 208V model.

www.hiqsolar.com



HUAWEI

The Huawei SUN2000-45KTL-US-HV-D0 is said to be the world's first 1500Vdc string inverter. Huawei's 8-string inverter provides intelligent string monitoring and power line communication technology. With real-time operation monitoring, it offers adaptive edge 4MPPT for fast tracking.

The maximum efficiency reaches 99 percent and CEC efficiency of 98.5 percent. The DC is AFCI compliant to UL 1699B, and the DC disconnect is integrated, offering safety and convenience for maintenance and ground fault protection with Category C surge arresters for both DC and AC. Its five-level topology can significantly reduce self-power consumption and directly increase energy yield by more than 0.3 percent.

www.huawei.com



to page 22

from page 21

INGETEAM

Ingeteam's new 1,500Vdc central inverter features the highest power density on the market (5.34W/in³), says the company. This NE-MA3-rated PV inverter can deliver its rated power up to 122°F, and it complies with UL-1741. Thanks to its compactness, up to three inverters can be integrated into MV skids, achieving up to 4.91MVA.

www.ingetteam.com



OUTBACK POWER

OutBack's FLEXpower Radian systems are prewired and pretested to save valuable installation time and reduce problems at the job-site. Available in 4kW and 8kW versions, FLEXpower Radian includes the charge controller(s), networking, communications and programming components, and load center all on one pre-assembled unit that hangs on the wall. The SystemEdge option adds energy storage.

www.outbackpower.com



KACO NEW ENERGY

The Ultraverter from KACO new energy is packaged with only three separate SKUs, while similar competing products often require larger numbers of different sizes and components, a common cause of unfavorably high inventory levels for installers and distributors, says the company.

Eliminating the need for costly proprietary Balance of System (BOS) components, KACO's Ultraverter is customized for compatibility with the most accessible, user-friendly and cost-effective components in PV design, says the company,

a decision executed specifically based on distributor/installer feedback regarding opportunities to reduce BOS and installation costs.

www.kaco-newenergy.com



SCHNEIDER ELECTRIC

Schneider Electric recently launched the Conext SmartGen, an intelligent, cloud-connected 1500-volt utility-scale power conversion system. It records and stores its own operation and service history, has self-diagnostic capabilities, and can send predictive maintenance warnings and reports through the cloud. Housed in a water- and dust-sealed corrosion-proof enclosure, the inverter is designed to deliver up to 2MVA of power for 30 years.

www.schneider-electric.com



NEXTRONEX

The RAY-MAX 2 Power Podium is an integrated inverter system providing the Nextronex patented Distributed Architecture preassembled, prewired, and pretested in the company's factory. The Power Podiums range from 275 kW to 2.2 MW AC offering a central inverter solution with the advantages of modular topology that includes 480V up to 25kV Class output.

www.nextronex.com



SIC USA (SATCON)

Next generation Satcon EQX inverters are designed for 1000Vdc and will also be available for 1500Vdc in Q2 of 2017. New generation EQX models are designed based on proven PowerGate Plus technology with increased efficiency and higher operating temperatures, and they come with advanced grid management features such as ZVRT, LVRT, and LFRT as standard features.

www.sicusallc.com



SMA

SMA offers among the industry's broadest solar inverter portfolios, ranging from module-level technologies for the residential market through large-scale, centralized

utility solutions. The company's system approach enables integrators to reduce labor and improve ROI with low-risk solutions tailored to their individual business model.

www.SMA-America.com



SOLAREEDGE

SolarEdge, a top global inverter company, addresses a broad range of solar segments. The SolarEdge system consists of power optimizers, inverters, storage, smart energy management solutions, and a cloud-based monitoring platform. Using a novel power conversion technology, the company's award-winning HD-Wave inverter provides up to 7.6 kW, record efficiency, and excellent reliability, at less than 25.3 lbs, says the company.

www.solaredge.com



SPARQ SYSTEMS

The Q1000 from Sparq Systems features all the benefits of a microinverter at a cost comparable to string inverters, says the company. It combines four micro-inverters into one while providing independent MPPT and monitoring for each PV module. It has the highest power density and lowest weight in the industry and is California Rule 21 compliant, says the company.

www.sparqsys.com



SUNGROW

Sungrow, with over 26 GW deployed globally, is a technology leader in the inverter industry. At SPI 2016, the company showcased the world's first 1500VDC-rated string inverter. A machine that packs 125kW of output in just a 130-lb cabinet, Sungrow's SG125HV is leading the solar industry's transition to 1500V systems, says the company.

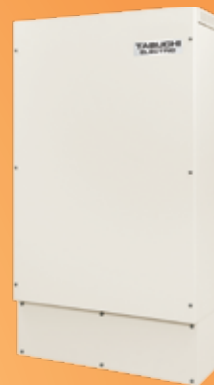
www.sungrowpower.com



TABUCHI

Tabuchi Electric offers a residential solar plus storage energy solution that combines a 5.5kW solar inverter with a 10kWh lithium-ion battery optimized for energy management and cost performance. Features of this 3 MPPT system include solar, battery, and self-consumption monitoring, dynamic demand response, internal battery charge controller, and an automatic transfer switch. Four operational modes help end users optimize energy use and maximize savings.

www.tabuchiamerica.com



TMEIC

The Solar Ware Samurai photovoltaic inverter is the world's first 1500VDC inverter certified to UL1741, says TMEIC. Utilizing TMEIC heat-pipe technology, the inverter runs without fan operation up to 50 percent load. Heat-pipe cooling significantly simplifies thermal management; it uses fewer parts and a slow-speed fan with a heat-pipe heat sink.

www.tmeic.com



YASKAWA – SOLECTRIA SOLAR

Yaskawa – Solectria Solar, a wholly owned subsidiary of Yaskawa America Inc., is a leading commercial inverter supplier in the U.S. Solectria's products include 3.8kW to 750kW inverters, string combiners, and web-based monitoring for all sizes of solar power systems. All of Solectria's three-phase central inverters are made in the U.S. PV System owners, developers, and EPCs are said to rely on the high performance, reliability, and bankability of Yaskawa – Solectria Solar.

www.solectria.com

