

Three Phase PV String Inverter

17-30 kW Low-voltage Series



The Afore Three-phase string inverters Low-voltage Series are designed for commercial and power plant PV system applications, rating from 17kW to 30kW. All models with aluminum housings which is anodized, increasing durability and effectively prevents corrosion. Equipped with external inductors, ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

The inverter menu is activated by sensor touch buttons. Communication implements are via the Wi-Fi module (can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal APP.

MAX. 20A String Current Up To 20A	PV OVERSIZE Max. 1.5 Time PV Oversize Input	PROTECTION Multiple Intelligent Protections	ANTI-FLOW Anti-Feed-in Function	Wi-Fi Wi-Fi Standard, Ethernet/GPRS Optional	CONFIGURATION Quick & Easy Config. via Wi-Fi	MODBUS MODBUS Communication Ready

- MPPT efficiency > 99.9%
- IP 68 Cooling Fan
- Intelligent Temperature Control System
- Type II DC & AC lightning protection
- Active and reactive power compensation, adjust power factor
- AC output 1.1x continuous operation

PV Input Data	BNT017KTA	BNT020KTA	BNT025KTA	BNT030KTA
Max. DC Power (W)	25500	30000	37500	45000
Max. DC Voltage (V)	750			
MPPT Voltage Range (V)	200 - 700			
MPPT Full Power Voltage Range (V)	310- 600	320- 600	300- 600	
Rated Input Voltage (V)	400			
Start-up Voltage (V)	150	200		
Max. Input Current (A)	38 x 2	38 x 3	40 x 3	38 x 4
Max. Short Current (A)	48 x 2	48 x 3	48 x 3	48 x 4
No. of MPP Tracker / No. of PV String	2 / 5	3 / 6	3 / 7	4 / 8
Input Connector Type	MC4			
AC Output Data	BNT017KTA	BNT020KTA	BNT025KTA	BNT030KTA
Max. Output Power (W)	18700	22000	27500	33000
Nominal Output Power (W)	17000	20000	25000	30000
Max. Output Current (A)	48	60	80	96
Nominal Output Voltage (V)	3P+N+PE / 3P+PE 133/230			
Grid Voltage Range	180-260Vac (According to local standard)			
Nominal Output Frequency (Hz)	50/60			
Grid Frequency Range	45-55 / 55-65Hz (According to local standard)			
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)			
Output Current THD	<3%			
Efficiency	BNT017KTA	BNT020KTA	BNT025KTA	BNT030KTA
Max. Efficiency	98.40%			
Euro Efficiency	98.00%	98.10%		
Protection	BNT017KTA	BNT020KTA	BNT025KTA	BNT030KTA
PV Reverse Polarity Protection	YES			
PV Insulation Resistance Detection	YES			
AC Short Circuit Protection	YES			
AC Over Current Protection	YES			
AC Over Voltage Protection	YES			
Anti-Islanding Protection	YES			
Residual Current Detection	YES			
Over Temperature Protection	YES			
Integrated DC switch	YES			
Surge Protection	Integrated (Type II)			
General Data	BNT017KTA	BNT020KTA	BNT025KTA	BNT030KTA
Dimensions (W x H x D, mm)	450 x 485 x 210	710 x 470 x 236		51
Weight (kg)	26	44		51
Protection Degree	IP65			
Enclosure Material	Aluminum			
Ambient Temperature Range (°C)	-25 - +60			
Humidity Range	0-100%			
Topology	Transformerless			
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)			
Cooling Concept	Intelligent Fan Cooling			
Noise Emission (db)	<51		<55	
Night Power Consumption (W)	<1			
Max. Operation Altitude (m)	2000			
Certifications and Standards	BNT017KTA	BNT020KTA	BNT025KTA	BNT030KTA
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12			
Safety Standard	IEC 60068, UL1741, EN62109			
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727			