

Commercial & Power Plants BNT series

BNT

17-30 kW



The Afore BNT Series Three-phase string inverters 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 or APP.

**Max.
20A**

MAX. 20A_{dc}
String Current Up To 20A

**Max.
1.5**

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%



Intelligent Temperature Control System



Active and reactive power compensation, adjust power factor



IP 68 Cooling Fan



Type II DC & AC lightning protection



AC output 1.1x continuous operation

PV Input Data	BNT017KTL	BNT020KTL	BNT025KTL	BNT030KTL
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)	380	400		
Start-up Voltage (V)	250	320		
Max. Input Current (A)	38 x 3		40 x 3	38 x 4
Max. Short Current (A)	48 x 3		48 x 3	48 x 4
No. of MPP Tracker / No. of PV String	3 / 6		3 / 7	4 / 8
Input Connector Type	MC4			

AC Output Data	BNT017KTL	BNT020KTL	BNT025KTL	BNT030KTL
Max. Output Power (W)	18700	22000	26500	33000
Nominal Output Power (W)	17000	20000	25000	30000
Max. Output Current (A)	49.1	61	80	95
Nominal Output Voltage (V)	3P+N+PE /3P+PE 220/230			
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	BNT017KTL	BNT020KTL	BNT025KTL	BNT030KTL
Max. Efficiency	98.10%	98.00%	98.40%	98.40%
Euro Efficiency	97.50%	97.82%	98.02%	98.10%

Protection	BNT017KTL	BNT020KTL	BNT025KTL	BNT030KTL
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	BNT017KTL	BNT020KTL	BNT025KTL	BNT030KTL
Dimensions (H x W x D, mm)	712 x 427 x 232		712 x 427 x 232	
Weight (kg)	45	55	56	
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)	≤4000			

Certifications and Standards	BNT017KTL	BNT020KTL	BNT025KTL	BNT030KTL
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			