

BNT Series / 30-60kW

Commercial Three Phase String Inverter



Max. 20A

String Current Up To 20A



Anti-Feed-in Function

Max. 1.5

Max. 1.5 Time PV Oversize Capacity



Wi-Fi Standard Ethernet/GPRS Optional



Quick & Easy Config. via Wi-Fi



Multiple Intelligent Protections



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	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
Max. DC Power (W)	45000	54000	60000	75000	90000
Max. DC Voltage (V)	1100				
MPPT Voltage Range (V)	200-1000				
MPPT Full Power Voltage Range (V)	500-850				
Rated Input Voltage (V)	620				
Start-up Voltage (V)	200				
Max. Input Current (A)	38x3		40x3		38x4
Max. Short Current (A)	48x3		48x3		48x4
No. of MPPT Tracker / No. of PV String	3/6		3/7		4/8
Input Connector Type	MC4				

AC Output Data	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
Max. Output Power (W)	33000	39600	44000	55000	66000
Nominal Output Power (W)	30000	36000	40000	50000	60000
Max. Output Current (A)	48	60	65	80	96
Nominal Output Voltage (V)	3P+N+PE / 3P+ PE230 / 400				
Grid Voltage Range	260Vac-519Vac (according to local standard)				
Nominal Output Frequency (Hz)	50 / 60				
Grid Frequency Range	45-55Hz/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	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
Max. Efficiency	98.50 %	98.65 %	98.65 %	98.80 %	99.00 %
Euro Efficiency	98.10 %	98.20 %	98.25 %	98.45 %	98.50 %

Protection	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
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)				
Smart IV Curve Scanning	YES				
Quick Arc Fault Circuit Interruption	Optional				

General Data	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
Dimensions (H x W x D, mm)	712x 427x 232				
Weight (kg)	42	43	45	51	
Protection Degree	IP65				
Enclosure Material	Aluminum				
Ambient Temperature Range (°C)	-25 to 60				
Humidity Range	0-100%				
Topology	Transformerless				
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)				
Cooling Concept	Intelligent FanCooling				
Noise Emission (db)	<51		<55		
Night Power Consumption (W)	<1				
Max. Operation Altitude (m)	≤4000				

Certifications & Standards	BNT030KTL	BNT036KTL	BNT040KTL	BNT050KTL	BNT060KTL
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				