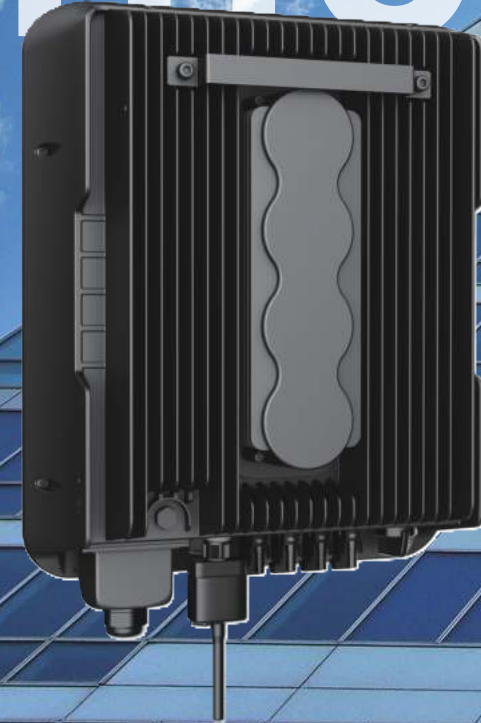


# BNT Series / 3-25kW

Residential Three Phase String Inverter



# Smart Safety Efficient



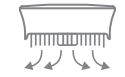
Wide MPPT Range

Max. 1.5

1.5 Times PV Oversize

Max. 1100V

Max. DC 1100V



One-piece Aluminum Housing



Build-in SPD Type II



Smart IV Curve Scanning



Remote Firmware Update

- Quick Arc Fault circuit interruption (Optional)
- WIFI standard
- Compact design
- Multiple intelligent protections
- Compatible with bifacial modules
- String level monitoring

PV Input Data	BNT003KTL	BNT004KTL	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
Max. DC Power ( W )	5100	6000	7500	9000	12000	15000
Max. DC Voltage ( V )	1100					
MPPT Voltage Range ( V )	150-1000					
MPPT Full Power Voltage Range ( V )	200-850		250-850	300-850	500-850	
Rated Input Voltage ( V )	620					
Start-up Voltage ( V )	150					
Max. Input Current ( A )	15x2					
Max. Short Current ( A )	25x2					
No. of MPPT Tracker / No. of PV String	2/2					
Input Connector Type	MC4					

### AC Output Data

Max. Output Power ( W )	3300	4400	5500	6600	8800	11000
Nominal Output Power ( W )	3000	4000	5000	6000	8000	10000
Max. Output Current ( A )	5.3	7	8.5	10.5	13.5	17
Nominal Output Voltage ( V )	3P+N+PE / 3P+PE 230 / 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

Max. Efficiency	98.30%				98.70%	
Euro Efficiency	97.61%	97.65%	98.00%	98.05%	98.23%	

### Protection

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

Dimensions (H x W x D, mm)	510 x 370 x 167	510 x 370 x 192
Weight ( kg )	16	15
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	Convection	Intelligent fan cooling
Noise Emission ( db )	<30	
Night Power Consumption ( W )	<1	
Max. Operation Altitude ( m )	≤4000	

### Certifications & Standards

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

PV Input Data	BNT012KTL	BNT013KTL	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL
Max. DC Power ( W )	18000	19500	22500	25500	30000	37500
Max. DC Voltage ( V )	1100					
MPPT Voltage Range ( V )	150-1000					
MPPT Full Power Voltage Range ( V )	500-850					
Rated Input Voltage ( V )	620					
Start-up Voltage ( V )	150					
Max. Input Current ( A )	15x2	20+32	32x2			
Max. Short Current ( A )	25x2	30+48	48x2			
No. of MPPT Tracker / No. of PV String	2/2	2/3	2/4			
Input Connector Type	MC4					

### AC Output Data

Max. Output Power ( W )	13200	14300	16500	18700	22000	27500
Nominal Output Power ( W )	12000	13000	15000	17000	20000	25000
Max. Output Current ( A )	21.5	22	27	30	32	40
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

Max. Efficiency	98.70%			98.75%		
Euro Efficiency	98.23%			98.35%		

### Protection

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

Dimensions (H x W x D, mm)	510x 370x 192	535x 370x 192
Weight ( kg )	15	19
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 fan cooling	
Noise Emission ( db )	<40	<51
Night Power Consumption ( W )	<1	
Max. Operation Altitude ( m )	≤4000	

### Certifications & Standards

EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12
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