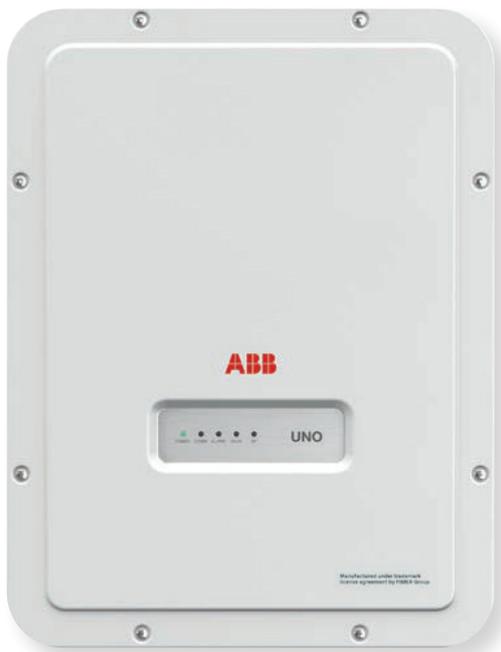


## ABB SINGLE-PHASE INVERTERS

UNO-DM-3.3/4.0/5.0-TL-PLUS-(S)B-Q^



The new UNO-DM-PLUS single-phase inverter family, with power ratings from 3.3 to 5.0 kW, is the optimal solution for residential installations.

The new design wraps European quality and engineering into a lightweight and compact package, includes a streamlined physical design with a reduced component count.

The dual maximum power point trackers allow for installations with different orientation. With embedded wireless connectivity and smart grid capabilities, it provides homeowners with advanced monitoring, control and maintenance.

All service software is embedded within the inverter and wirelessly accessible using any smart device or PC. This reduces the operation and maintenance burden for installers and associated costs for home owners.

\*Manufactured under trademark licence agreement by FIMER Group.

### How you benefit:



#### HIGH EFFICIENCY

Superior efficiency of up to 99.5%, generating more power from your PV system.



#### FLEXIBLE DESIGN

Individual panel monitoring and management allows flexible designs and increased power production.



#### SAFE OPERATION

Automatic panel-level voltage shutdown feature for installer and firefighter safety.



#### INNOVATIVE

Next generation maintenance with panel-level monitoring.



#### SOLAHART WARRANTY

Enjoy a 12-year warranty, for peace of mind.

# TECHNICAL DATA

## AND TYPES

Type code	UNO-DM-3.3-TL-PLUS-Q	UNO-DM-4.0-TL-PLUS-Q	UNO-DM-4.6-TL-PLUS-Q	UNO-DM-5.0-TL-PLUS-Q
<b>Input side</b>				
Absolute maximum DC input voltage ( $V_{max,abs}$ )	600 V			
Start-up DC input voltage ( $V_{start}$ )	200 V (adj. 120...350 V)			
Operating DC input voltage range ( $V_{dcmin...V_{dcmax}}$ )	0.7 x $V_{start}$ ...580 V (min 90 V)			
Rated DC input voltage ( $V_{dcr}$ )	360 V			
Rated DC input power ( $P_{dcr}$ )	3500 W	4250 W	4750 W	5150 W
Number of independent MPPT	2			
Maximum DC input power for each MPPT ( $P_{MPPTmax}$ )	2000 W	3000 W	3000 W	3500 W
DC input voltage range with parallel configuration of MPPT at $P_{acr}$	170...530 V	130...530 V	150...530 V	170...480 V
DC power limitation with parallel configuration of MPPT $P_{acr}$	Linear derating from Max to Null [ $530V \leq V_{MPPT} \leq 580V$ ]	Linear derating from Max to Null [ $530V \leq V_{MPPT} \leq 580V$ ]	Linear derating from Max to Null [ $530V \leq V_{MPPT} \leq 580V$ ]	Linear derating from Max to Null [ $480V \leq V_{MPPT} \leq 580V$ ]
DC power limitation for each MPPT with independent configuration of MPPT at $P_{acr}$ , max unbalance example	2000 W [ $200 V \leq V_{MPPT} \leq 530 V$ ] the other channel: $P_{dcr}$ -2000 W [ $112 V \leq V_{MPPT} \leq 530 V$ ]	3000 W [ $190 V \leq V_{MPPT} \leq 530 V$ ] the other channel: $P_{dcr}$ -3000 W [ $90 V \leq V_{MPPT} \leq 530 V$ ]	3000 W [ $190 V \leq V_{MPPT} \leq 530 V$ ] the other channel: $P_{dcr}$ -3000 W [ $90 V \leq V_{MPPT} \leq 530 V$ ]	On MPPT 1: 3500 W [ $185 V \leq V_{MPPT} \leq 480 V$ ] On MPPT 2: $P_{dcr}$ -3500 W [ $145 V \leq V_{MPPT} \leq 480 V$ ] or 3500 W ( $305 V \leq V_{MPPT} \leq 480 V$ ) with no power on MPPT1
imum DC input current ( $I_{dcmax}$ ) / for each MPPT ( $I_{MPPTmax}$ )	20.0/10.0 A	32.0/16.0 A	32.0/16.0 A	30.5/19-11.5 A (MPPT 1 - MPPT 2)
Maximum input short circuit current for each MPPT	20.0 A	22.0 A	22.0 A	22.0 A
Number of DC input pairs for each MPPT	1			
DC connection type <sup>1)</sup>	Quick Fit PV Connector			
<b>Input protection</b>				
Reverse polarity protection	Yes, from limited current source			
Input over voltage protection for each MPPT-varistor	Yes			
Photovoltaic array isolation control	According to local standard			
DC switch rating for each MPPT (version with DC switch)	25 A / 600 V			
<b>Output side</b>				
AC grid connection type	Single-phase			
Rated AC power ( $P_{acr}$ @ $\cos\phi=1$ )	3300 W	4000 W	4600 W	5000 W
Maximum AC output power ( $P_{acmax}$ @ $\cos\phi=1$ )	3300 W	4000 W 2)	4600 W	5000 W
Maximum apparent power ( $S_{max}$ )	3300 VA	4000 VA 2)	4600 VA	5000 VA
Rated AC grid voltage ( $V_{ac,r}$ )	230 V			
AC voltage range <sup>3)</sup>	180...264 V			
Maximum AC output current ( $I_{ac,max}$ )	14.5 A	17.2 A	20.0 A	22.0 A
Contributory fault current	16.0 A	19.0 A	22.0 A	24.0 A
Rated output frequency ( $f_r$ ) <sup>4)</sup>	50/60 Hz			
Output frequency range ( $f_{min...f_{max}}$ ) <sup>4)</sup>	47...53/57...63 Hz			
Nominal power factor and adjustable range	> 0.995, adj. $\pm$ 0.1 - 1 (over/under excited)			
Total current harmonic distortion	< 3%			
AC connection type	Female connector from panel			
<b>Output protection</b>				
Anti-islanding protection	According to local standard			
Maximum external AC overcurrent protection	20.0 A	25.0 A	25.0 A	32.0 A
Output overvoltage protection - varistor	2 (L - N / L - PE)			

Specifications and designs included in this data sheet are subject to change without notice.