# SUNNY BOY 3.0-US / 3.8-US / 5.0-US / 6.0-US / 7.0-US / 7.7-US





### Value-Added Improvements

- SunSpec certified technology for cost-effective module-level shutdown
- Advanced AFCI compliant to UL
   1699B for arc fault protection

### **Reduced Labor**

- New Installation Assistant with direct access via smartphone minimizes time in the field
- Advanced communication interface with fewer components creates 50% faster setup and commissioning

#### **Optimized Power Production**

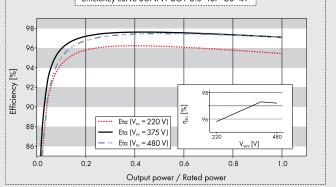
- ShadeFix, SMA's proprietary shade management solution, produces more power than alternatives
- Reduced component count provides
   maximum system reliability
- **Trouble-Free Service**
- SMA Service Mobile App provides simplified, expedited field service
- Equipped with SMA Smart Connected, a proactive service solution that is integrated into Sunny Portal

# SUNNY BOY 3.0-US / 3.8-US / 5.0-US / 6.0-US / 7.0-US / 7.7-US

Power with a purpose

The residential PV market is changing rapidly. Your bottom line matters more than ever—so we've designed a superior residential solution to help you decrease costs at every stage of your business operations. The Sunny Boy 3.0-US/3.8-US/5.0-US/6.0-US/7.0-US/7.7-US join the SMA lineup of field-proven solar technology backed by the world's #1 service team. This improved residential solution features ShadeFix, SMA's proprietary technology that optimizes system performance. ShadeFix also provides superior power production with a reduced component count versus competitors, which provides maximum reliability. No other optimized solution generates more power or is as easy as systems featuring SMA ShadeFix and SunSpec certified devices. Finally, SMA Smart Connected will automatically detect errors and initiate the repair and replacement process so that installers can reduce service calls and save time and money.

Input IDC          201V	Technical data	Sunny Bo		Sunny Bo		Sunny Bo					
Max R P voltage range         4400 Wp         6144 Wp         B000 Wp           Rated MP voltage range         155 - 480 V         195 - 480 V         220 - 480 V           Read MPF voltage range         155 - 480 V         100 - 550 V         220 - 480 V           Mix DC voltage range         100 V / 125 V         100 - 550 V         200 - 480 V           Mix DC voltage range         100 V / 125 V         100 A         300 V/         330 W         3840 W         5000 W         5000 V           Number of APPT Incoder         2/1         0 A         3000 V/         3300 W         3840 W         5000 V/         200 V/ </th <th></th> <th>208 V</th> <th>240 V</th> <th>208 V</th> <th>240 V</th> <th>208 V</th> <th>240 V</th>		208 V	240 V	208 V	240 V	208 V	240 V				
Max. CC voltage         600 V           Beak MPP voltage range         155 - 460 V         103 - 550 V           MIPC operating voltage range         100 V / 125 V           Max. Adv. Cloud current per MPP1         10A           Max. Adj. per MPP1         10A           Max. Adj. cloud current per MPP1         10A / 40A           Max. Adj. cloud current per MP1         10A / 40A           Max. Adj. cloud current per MP1         10A / 40A           Max. Adj. cloud current per MP1         10A / 40A           Max. Adj. cloud current per MP1         11/ 2 / 44N           Max. Adj. cloud current per MP1         1/ 2           Max. Adj. cloud current per MP1         1/ 2           Max. Adj. c	• • •					0.000	N 14 (				
Band MPP adding strong         135 - 480 V         195 - 480 V         220 - 480 V           Mark Operating Strong errorg         100 - 550 V         100 - 550 V           Max Operating Strong errorg         100 V / 125 V         100 - 550 V           Max Schwiding input current per MPPI         18 A         100 V / 125 V           Max Schwiding input current per MPPI         18 A         100 V / 125 V           Max Schwiding input current per MPPI         18 A         3000 V         3330 V         3840 W         5000 V         5000 V           Max AC apparent power         3000 VA         3300 VA         3330 VA         3840 VA         5000 VA         2000 VA         <	•										
MPPT operating voltage range         100 - 550 V           Max. And closel current per MPPT         104           Max. And closel / string per MPPT         104           Max. And closel / string per MPPT         104           Anomalies Conserved         2/1           Anomalies Conserved         3000 W           Max. And closel / string per MPPT         104           Max. And closel / string per MPPT         104           Anomalies Conserved         3000 W           Max. Ac approver         3000 VA           Max. Ac approver         3000 VA           Max. Ac approver         3000 VA           Max. Approver         3000 VA           Ac values conserver         3000 VA           Max. Applicat current         113 - 229 V           Max. Applicat current         14.5 A           Max. Applicat current         14.5 A           Max. Applicat current         14.5 A           Cic Chicancy         97.2 %           Opticat Conserver         97.3 %           Output (bases / Inne connections         11/< 4.4 %											
Min. DC voltage / sam voltage         100 V / 125 V           Mix. DC voltage / sam voltage         100 V / 125 V           Mix. Spont function of MMPT incoder         2/1         3/1           Output (AC)         2/1         3/1           Mix. AC opparent input current per MPPT         18 A           AC nominal power         3000 W         3000 V/         3330 W         3840 W         5000 W         5000 V           Mix. AC opparent power         3000 V/         2330 V/         240 V/         208 V/         240 A         210 J           Mix. Michage connections         11/2 K         100 A         160 A         240 A         210 J           Diver fortar (co. 8) / hormonics         1/2 K         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %											
Max. operating input current par MPT         10 A           Number of MPPT Inocker / string par MPPT Inocker         2/1         3 / 1           Ac nominal power         3000 W         3000 W         3330 W         3840 W         5000 W         5000 V           Ac nominal voltage / digutable         208 V /         200 V /         208 V /         200											
Max. Brid         IB A           Number of MPT Incoker / sting per MPT Incoker         2/1         3/1           CA noninal power         3000 W         3300 W         3330 W         3840 W         5000 W         5000 W           Kar. Acceptorel power         3000 V/         2000 V/         200 V/ </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>											
Number of MPFI facker         2/1         3 / 1           Output (AC)         3000 W         3300 W         3330 W         3840 W         5000 W         5000 V           AC nominal owner         3000 W         3000 V         3300 V         3840 W         5000 V         500 V											
Output (AC)         Nominal power         3000 W         3000 W         3330 W         3840 W         5000 W         5000 VA           Nominal power         3000 VA         3000 VA         3330 VA         3840 VA         5000 VA         500 VA         500VA         5000 VA         500 VA         <	-		2		A	2	/ 1				
AC_nominal power         3000 W         3300 W         3330 W         3840 W         5000 W         5000 V           Max. AC apparent power         3000 VA         3000 VA         3300 VA         3840 VA         5000 VA <td></td> <td colspan="9">2/1 3/1</td>		2/1 3/1									
Max. AC apprent power         3000 VA         3300 VA         3330 VA         3330 VA         5000 VA         5000 VA           Vaminal voltage / adjustable         208 V/•         240 V/•         208 V/•         240 V/•         208 V/•         240 V/•         200 V/•	• • •	3000 \\/	3000 \/	3330 \/	3840 \\/	5000 \\/	5000 \/				
Nominal values         208 V/€         240 V/€         208 V/€         211 - 264 V         201 V/€         208 V/€         V/€ <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	•										
No. volkoge range       183 - 229 V       211 - 264 V       183 - 249 V       210 - 264 V       183 - 261 V       183 - 261 V											
AC grid Requency       60 Hz / 50 Hz         Wax. audput current       14.5 A       12.5 A       16.0 A       24.0 A       21.0 /         Wax. audput current       1 / < 4 %											
Non: output current         14.5 A         12.5 A         16.0 A         16.0 A         24.0 A         21.0 A           Yower factor (cos \$) / hormonics         1/2         1/2         1/2         1/2           Efficiency         97.2 %         97.6 %         97.3 %         97.6 %         97.5 %         97.6 %         97.5 % <td></td> <td>105 - 227 V</td> <td>211 - 204 V</td> <td></td> <td></td> <td>103 - 227 V</td> <td>211 - 204 (</td>		105 - 227 V	211 - 204 V			103 - 227 V	211 - 204 (				
bower factor (cos \$) / hormonics         1 / < 4 %		145 A	125 Δ			240 4	21.0 A				
Dupply phases / line connections       1 / 2         fiftiency       97.2 %       97.6 %       97.3 %       96.5 %       96.5 %       96.5 %       96.5 %       96.5 %       96.5 %       96.5 %       96.5 %       96.5 %       96.5 %       96.5 %       97.0 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.3 %       97.6 %       97.6 % <td>•</td> <td colspan="9"></td>	•										
Stifficiency         97.2 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         97.3 %         97.6 %         9											
Max. efficiency       97.2 %       97.6 %       97.3 %       97.6 %       97.				1/	-						
EEC efficiency         96.0 %         96.5 %         96.5 %         96.5 %         97.0 %           Variation devices         O <t< td=""><td></td><td>97 2 %</td><td>976%</td><td>97.3 %</td><td>976%</td><td>97.3 %</td><td>976%</td></t<>		97 2 %	976%	97.3 %	976%	97.3 %	976%				
Protection devices C disconnect device / DC reverse polarity protection C disconnect device / DC reverse polarity C disconnect device / DC reverse device / DC r											
DC disconnect device / DC reverse polarity protection       ● / ●         Scound fault monitoring / Grid monitoring       ●         Xe Short circuit protection       ●         Allpole sensitive residual current monitoring unit (RCMU)       ●         Are fault circuit interrupter (AFCI)       ●         Protection class / overvoltage category       I / IV         Seneral data       ●         Dimensions (W / H / D) in mm (in)       535 x 730 x 198 (21.1 x 28.5 x 7.8)         Vackaging dimensions (W / H / D) in mm (in)       600 x 800 x 300 (23.6 x 31.5 x 11.8)         Veight / packaging weight       2 bk (57.1b / 30 kg (66 lb)         if emperature range: operating / non-operating       -25*C+60*C / -40*C+60*C         invinomental protection rating       NEMA 3R         Noise emission (W / H / D) in mm (in)       39 dB(A)         if emperature range: operating / non-operating       -25*C+60*C / -40*C+60*C         invinomental protection rating       NEMA 3R         Noise emission (W / H / D)       39 dB(A)         if emperature range: operating / non-operating       -25*C+60*C / -40*C+60*C         invinomental protection rating       NEMA 3R         Sobies emission (S / Q) / cosing       1         if earbords       2         if opology / cooling concept       1 <td></td> <td>70.070</td> <td>70.070</td> <td>/0.0 /0</td> <td>70.0 /0</td> <td>70.070</td> <td>77.0 %</td>		70.070	70.070	/0.0 /0	70.0 /0	70.070	77.0 %				
Ground fault monitoring / Grid monitoring <ul> <li>AC short circuit protection</li> <li>Allpole sensitive residual current monitoring unit (RCMU)</li> <li>Ac fault circuit interrupter (AFCI)</li> <li>Treatection class / overvoltage category</li> <li>I / IV</li> </ul> General data <ul> <li>Standard fault monitoring / D in mm (in)</li> <li>S35 x 730 x 198 (21.1 x 28.5 x 7.8)</li> <li>Packaging dimensions (W / H / D) in mm (in)</li> <li>Good x 800 x 300 (23.6 x 31.5 x 11.8)</li> <li>Vel (57.1b) / 30 kg (66 lb)</li> <li>Imperature range: operating / non-operating</li> <li>-25° C+60° C /+60° C</li> <li>microannetic protection rating</li> <li>NEMA 3R</li> </ul> Noise emission (typical)         39 dB(A)               nternal power consumption at night <li>Gopology / cooling concept</li> <li>transformerless / convection</li> Features         2           Siecure Power Supply <ul> <li>II</li> <li>Display (2 x 16 characters)</li> <li>24 GHz WLAN / External WLAN antenna</li> <li>ShadeFix technology for string level optimization</li> <li>Cellular (4G / 3G) / Revenue Grade Meter</li> <li>V / 0 / 0 31</li> <li>UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 16998 Ed. 1, IEEE15427, FCC Part 15 (Class A &amp; B CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Ropid Shutdown System Equipment</li> <li>Standard features</li> <li>O Optional features</li> <li>Not compatible with SunSpec shutdown</li></ul>				•							
AC short circuit protection Whole sensitive residual current monitoring unit (RCMU) Ac foult circuit interrupter (AFCI) Protection class / overvoltage category I / IV General data Dimensions (W / H / D) in mm (in) Stackaging dimensions (W / H / D) in mm (in) Stackaging dimensions (W / H / D) in mm (in) Stackaging dimensions (W / H / D) in mm (in) Acakaging dimensions (W / H / D) in mm (in) Stackaging dimensing (W / H / D) in mm (in) Stackaging dimensing (W / H / D) i	· · · · · ·			- /	-						
Allpole sensitive residual current monitoring unit (RCMU) Arc four dircuit interrupter (AFCI) Trotection class / overvoltage category T / V General data Dimensions (W / H / D) in mm (in) Sa5x 730 x 198 (21.1 x 28.5 x 7.8) Tackoging dimensions (W / H / D) in mm (in) Sa5x 730 x 198 (21.1 x 28.5 x 7.8) Tackoging dimensions (W / H / D) in mm (in) Sa5x 730 x 198 (21.1 x 28.5 x 7.8) Tackoging weight Saturation	• •										
Arc fault circuit interrupter (AFCI)  Totection class / overvoltage category  General data  Simensions (W / H / D) in mm (in)  Sackaging dimensions (W / A / A / A / A / A / A / A / A / A /											
Protection class / overvoltage category       I / IV         General data       Dimensions (W / H / D) in mm (in)       535 x 730 x 198 (21.1 x 28.5 x 7.8)         Optimiser of the state of the											
General data         Dimensions (W / H / D) in mm (in)       535 x 730 x 198 (21.1 x 28.5 x 7.8)         Packaging dimensions (W / H / D) in mm (in)       600 x 800 x 300 (23.6 x 31.5 x 11.8)         Weight / packaging weight       26 kg (57.1b) / 30 kg (66.1b)         Verget / packaging weight       25 °C+60 °C / -40 °C+60 °C         Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)         Internal power consumption at night       < 5 W				1/	IV						
Dimensions (W / H / D) in mm (in) Packaging dimensions (W / H / D) (I / J / J / J / J / J / J / J / J / J /				.,							
Packaging dimensions (W / H / D) in mm (in) Weight / packaging weight Iemperature range: operating / non-operating Environmental protection rating Nise emission (typical) Internal power consumption at night Secure Power Supply Display (2 x 16 characters) 2.4 GHz WLAN / External WLAN antenna Standard features Standard feature				535 x 730 x 198 (	21.1 x 28.5 x 7.8)						
Weight / packaging weight       26 kg (57 lb) / 30 kg (66 lb)         femperature range: operating / non-operating       -25°C+60°C / -40°C+60°C         Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)         nternal power consumption at night       < 5 W											
femperature range: operating / non-operating       -25°C+60°C / -40°C+60°C         Invionemental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)         internal power consumption at night       < 5 W											
Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)         nternal power consumption at night       < 5 W				• • • •	• · · ·						
Noise emission (typical) Internal power consumption at night Tepology / cooling concept Transformerless / convection Features Ethernet ports Secure Power Supply Display (2 x 16 characters) 2.4 GHz WLAN / External WLAN antenna ShadeFix technology for string level optimization Cellular (4G / 3G) / Revenue Grade Meter Warranty: 10 / 15 / 20 years Certificates and approvals Standard features Optional features - Not available & Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41 SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1SP-US-41 / SB3.8-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1SP-US-41 / SB3.0-1SP-US-41 / S											
Internal power consumption at night < 5 W Topology / cooling concept Features Ethernet ports 2 Secure Power Supply 0 Display (2 x 16 characters) 2 2.4 GHz WLAN / External WLAN antenna // 0 ShadeFix technology for string level optimization Cellular (4G / 3G) / Revenue Grade Meter // 0 Warranty: 10 / 15 / 20 years 0 / 0 / 0 3) UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 16998 Ed. 1, IEEE1547, FCC Part 15 (Class A & B) CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment Standard features 0 Optional features - Not available Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-ITP-US-41 SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB3.8-1TP-US-41 SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1TP-U Accessories Certified Revenue Grade Certified Revenue Grade Revenue Grade Certified Revenue Grade Certified Revenue Grade Certified Revenue Grade Certified Revenue Grade Revenue Grade Revenue Grade Revenue Grade Revenue Grade Revenue Grade Revenue Grade Revenue Grade Certified Revenue Grade Revenue Grade Revenue Grade Revenue Grade Revenue Grade Revenue Grade Certified Revenue Grade Revenue Grade Certified Revenue Grade Revenue Grade Revenue Grade Certified Revenue Grade Certified Revenue Grade Revenue Grade Revenue Grade Revenue Grade Certified Revenue Grade Certified Revenue Grade Revenue Grade Certified Revenue Grade Revenue Grade Revenue Grade Revenue Grade Certifi											
Topology / cooling concept       transformerless / convection         Features       2         Ethernet ports       2         Secure Power Supply       11         Display (2 x 16 characters)       4         2.4 GHz WLAN / External WLAN antenna       A / 0         ShadeFix technology for string level optimization       0         Cellular (4G / 3G) / Revenue Grade Meter       0 / 0 21         Warranty: 10 / 15 / 20 years       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         • Standard features       • Optional features       - Not available       & Subject to availability         Data at nominal conditions       1) Not compatible with SunSpec shutdown devices       2) Standard in SBX.X-ITP-US-41       SB3.0-1SP-US-41 / SB3.8-1TP-US-41       SB5.0-1SP-US-41 / SB5.0-1TP-US-41         Accessories       SunSpec Certified       Revenue Grade       Cellular Modem Kit											
Features       2         Ethernet ports       2         Secure Power Supply       11         Display (2 x 16 characters)       -         2.4 GHz WLAN / External WLAN antenna       / 0         ShadeFix technology for string level optimization       -         Cellular (4G / 3G) / Revenue Grade Meter       -         Warranty: 10 / 15 / 20 years       -         Certificates and approvals       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         • Standard features       - Not available         • Standard features       - Not availabile         • Subject to availability       -         Data at nominal conditions       1) Not compatible with SunSpec shutdown devices         • Sb3.0-1SP-US-41 / SB3.0-1TP-US-41       SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41         Accessories       SunSpec Certified       Revenue Grade				transformerles	convection						
Secure Power Supply  Isolate Supply  Isolate Structure Supply  In the second structure Supply  Isolate Structure Supply  Isolate Structure Structu					,						
Secure Power Supply  II  Display (2 x 16 characters)  2.4 GHz WLAN / External WLAN antenna  ShadeFix technology for string level optimization  Cellular (4G / 3G) / Revenue Grade Meter  () () 2)  Warranty: 10 / 15 / 20 years  UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B)  Certificates and approvals  UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B)  Certificates and approvals  UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B)  Certificates and approvals  UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B)  Can/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment  Standard features  Optional features  Not available  Subject to availability  Data at nominal conditions  1) Not compatible with SunSpec shutdown devices  SusSpec Certified  SunSpec Certified  Revenue Grade  Cellular Modem Kit	Ethernet ports			2	<u> </u>						
Display (2 x 16 characters)       •         2.4 GHz WLAN / External WLAN antenna       ▲ / ○         ShadeFix technology for string level optimization       •         Cellular (4G / 3G) / Revenue Grade Meter       • / ○ / ○ 2)         Warranty: 10 / 15 / 20 years       • / ○ / ○ 3)         Certificates and approvals       • UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B)         • Standard features       • Optional features       - Not available         • Standard features       • Optional features       - Not available         • Standard in sBX.X-1TP-US-41       SB3.0-1SP-US-41 / SB3.0-1TP-US-41       SB5.0-1SP-US-41 / SB5.0-1TP-US-41         Suspec Certified       © Cellular Modem Kit				•	1)						
2.4 GHz WLAN / External WLAN antenna       ▲ / ○         ShadeFix technology for string level optimization       ●         Cellular (4G / 3G) / Revenue Grade Meter       ○ / ○ 2)         Warranty: 10 / 15 / 20 years       ● / ○ / ○ 3)         Certificates and approvals       ● / ○ / ○ 3)         Standard features       ○ Optional features       – Not available         Standard features       ○ Optional features       – Not available         Standard features       ○ Optional features       – Not available         Standard features       ○ Not compatible with SunSpec shutdown devices       2) Standard in SBX.X-1TP-US-41         Sb3.0-1SP-US-41 / SB3.0-1SP-US-41 / SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB3.8-1SP-US-41 / SB5.0-1SP-US-41 / SB		•									
Cellular (4G / 3G) / Revenue Grade Meter Warranty: 10 / 15 / 20 years Certificates and approvals Standard features Optional features – Not available & Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1TP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1TP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1TP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1TP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1TP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-4		▲/ 0									
Cellular (4G / 3G) / Revenue Grade Meter Warranty: 10 / 15 / 20 years Certificates and approvals • Standard features • Optional features • Not available • Standard features • Not compatible with SunSpec shutdown devices • Standard in SBX.X-1TP-US-41 Type designation • External WLAN antenna • SunSpec Certified • Cellular Modem Kit	ShadeFix technology for string level optimization	•									
Certificates and approvals UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B) CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment Standard features Optional features Not available Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1TP-U Accessories External WLAN antenna	Cellular (4G / 3G) / Revenue Grade Meter										
CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment  Standard features Optional features Not available Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices SB3.0-1SP-US-41 / SB3.0-1TP-US-41 SB3.8-1SP-US-41 / SB3.8-1TP-US-41 SB5.0-1SP-US-41 / SB5.0-1TP-U Accessories  External WLAN antenna  SunSpec Certified  Cellular Modem Kit	Warranty: 10 / 15 / 20 years			• / c	/ O 3)						
CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment     Standard features Optional features – Not available Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41 Type designation     SB3.0-1SP-US-41 / SB3.0-1TP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 SB5.0-1SP-US-41 / SB5.0-1TP-U Accessories  External WLAN antenna	Cortificatos and approvals										
Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41 Type designation SB3.0-1SP-US-41 / SB3.0-1TP-US-41 / SB3.8-1SP-US-41 / SB3.8-1TP-US-41 / SB5.0-1SP-US-41 / SB5.0-1SP-US-41 / SB5.0-1TP-U Accessories SunSpec Certified Revenue Grade Cellular Modem Kit				7.1-1, HECO Rule 14	1H, PV Rapid Shutdo	wn System Equipmen	t				
Type designation       SB3.0-1SP-US-41 / SB3.0-1TP-US-41       SB3.8-1SP-US-41 / SB3.8-1TP-US-41       SB5.0-1SP-US-41 / SB5.0-1TP-US-41         Accessories       External WLAN antenna       SunSpec Certified       Cellular Modern Kit			,								
Accessories           External WLAN antenna         SunSpec Certified         Revenue Grade         (1)         Cellular Modern Kit											
External WLAN antenna SunSpec Certified Revenue Grade Cellular Modem Kit	,,	SB3.0-1SP-US-41,	/ SB3.0-1TP-US-41	SB3.8-1SP-US-41 /	SB3.8-1TP-US-41	SB5.0-1SP-US-41,	/ SB5.0-1TP-US-4				
	Accessories										
EXTANT-US-40 Receivers Rec	External WLAN antenna EXTANT-US-40	Rapid Shutdown		Meter Kit							



pay IDC)         200 V	Technical data	Sunny Boy 6.0-US		Sunny Boy 7.0-US		Sunny Boy 7.7-US					
Max. PL yobuper         9600 Wp         11200 Wp         12320 Wp           Nax. DC Yologa         600 V         2232 Vp           Rand MPP Yologa range         100 - 550 V         270 - 480 V           MSD C Yologa Hart weldage         100 - 750 V         700 V           Max. DC yologa / Alter weldage         100 - 750 V         700 V           Max. Short ficial functioners per MPT         10 A         700 V           Max. Alter function of MPT Incker / Jaing per MPT Incker         3 / 1         700 V/           Comput AC         200 V /         2200 V/         220 V/         2200 V/         220 V/         220 V/         220 V/         220 V/         220 V/         2200 V/         220 V/         220 V/		208 V	240 V	208 V	240 V	208 V	240 V				
Max. DC /olloge         600 /           Max. DC /olloge range         100 - 560 /           Min. DC /olloge / Jant voltage range         100 - 550 /           Min. DC /olloge / Jant voltage         100 / 125 /           Max. DC /olloge / Jant voltage         100 / 125 /           Max. DC /olloge / Jant voltage         3 / 1           Output (AC)         3 / 1           AC nominal power         5200 W         6000 W         6660 W         7000 W         6660 W         7680 W           Max. Act opprint power         5200 W         6000 W         6660 W         7000 W         6660 W         7680 W           Max. Act opprint power         5200 W         6000 W         6660 W         7000 W         6660 W         7680 W           Max. Act opprint power         5200 W         6000 W         6660 W         7000 W         6660 W         7680 W           Max. Actigenery         200 V         200 V /         200 V /         220 V /         200 V /	Input (DC)										
Binder MPP Collegies range         220 - 480 V         245 - 480 V         270 - 480 V           Min: DC voltage range         100 - 550 V         100 - 550 V         100 - 550 V           Min: DC voltage range         100 V / 125 V         100 - 550 V         100 - 550 V           Min: DC voltage range         100 V / 125 V         100 - 550 V         100 - 550 V           Min: DC voltage range         100 V / 125 V         100 V / 125 V         100 V / 125 V           Min: Di courrent per MPPI         10 A         31 T         500 V         6600 W         7000 VA         6660 W         7680 W           Min: AC coptical reamet power         5200 VA         6000 V/         200 V/         240 V/         208 V/         240 V/	Max. PV power	9600	0 Wp	1120	0 Wp	1232	0 Wp				
MPPT operating willoge range Min. DC: voltage / start voltage / Min. DC: voltage / start voltage / Max. sporting injust current per MPPT Max. short cicuit current per MPPT AC: nominal voltage / digitable // AC: nominal voltage	Max. DC Voltage										
Min. DC willing / start vollage       100 V / 125 V         Max. operating input current per MPFT       10 A         Max. do critical corrent per MPFT       10 A         Max. do critical corrent per MPFT       18 A         Number of MPFT Incolar / string per MPFT Incolar       3 / 1         AC. nonlinal power       5200 VA       6000 VX       6660 VX       7000 VA       6660 VX       7680 VA         Max. AC opperating over       5200 VA       6000 VV       6660 VX       7000 VA       6660 VX       7680 VA         AC nonlinal power       5200 VA       6000 VV       6660 VX       7680 VA       7690 VA       768 VA       768 VA       769 VA       789 VA       789 VA       789 VA       789 VA       75 %       775 %       973 %	Rated MPP Voltage range	220 - 480 V 245 - 480 V 270 - 480 V									
Max. appending input current per MPPT         10 A           Max. short circuit creater per MPPT         18 A           Number of MPT Incoker / sing per MPPT Incoker         3 / 1           Chright Carl         3 / 1           AC nominal power         5200 VA         6000 VA         6660 VA         7000 VA         6660 VA         7680 VA           Nack Ac nominal power         5200 VA         6000 VA         6660 VA         7680 VA         7680 VA           Nack Ac opponent power         5200 VA         6000 VA         6660 VA         7680 VA         7680 VA           Ac onlinal power         5200 VA         6000 VA         6660 VA         7680 VA         7680 VA           Ac onlinal power         5200 VA         240 V/•         240 V/• <td< td=""><td>MPPT operating voltage range</td><td></td><td></td><td>100 -</td><td>550 V</td><td></td><td></td></td<>	MPPT operating voltage range			100 -	550 V						
Nax. Short schult current par MPF1         18 A           Number of MPF1 tracker / string per MPF1 tracker         3 / 1           Oxport IAS)         5200 VA         6600 W         7000 W         6660 W         7000 W         6660 W         7680 VA           Max. AC appeter power         5200 VA         6000 V         6660 VA         7000 VA         6660 VA         7680 VA           Nominal voltage / adjustable         208 V / •         220 V / •         200 V / •         2	Min. DC voltage / start voltage										
Number of MPF1 tracker / string per MPF1 tracker         3 / 1           Output (AC)         A. fonninal onloger / Ac nonlinal power         5200 VA         6000 VA         6660 VA         7000 VA         6660 VA         7680 VA           Ac nonlinal voltage / adjustable         208 V / •         240 V / •         228 V / •         240 V / •         280 V / •         260 V / •	Max. operating input current per MPPT										
Output IACI           AC. nominal power         5200 VA         6600 VA         7000 VA         6660 VA         7000 VA         6660 VA         7080 VA           Naminal valtage / adjuatable         200 VA         2000 VA         2080 V/         2040 V/         2080 V/         2040 V/         2	Max. short circuit current per MPPT										
AC nominal power AC nominal power AC nominal power S200 W AC Nominal voltage / adjustable 208 V/● 200	Number of MPPT tracker / string per MPPT tracker										
Max. AC opporent power         5200 VA         6000 VA         6660 VA         7000 VA         6660 VA         7080 VA           Nominol voltage / adjustable         208 V/●         240 V/●         208 V/●	Output (AC)										
Nominal voltage / adjustable         208 V/●         240 V/●         183 - 229 V         211 - 264 V         32.0 A	AC nominal power	5200 W	6000 W	6660 W	7000 W	6660 W	7680 W				
AC walrage range       183 - 229 V       211 - 264 V       32.0 A	Max. AC apparent power	5200 VA	6000 VA	6660 VA	7000 VA	6660 VA	7680 VA				
AC gird frequency         60 Hz / 50 Hz           Max. volupt current         250 A         250 A         32.0 A         29.2 A         32.0 A         32.0 A           Power factor (cos 4) / harmonics         1 / < 4%	Nominal voltage / adjustable	208 V / •	240 V / •	208 V / •	240 V / •	208 V / •	240 V / •				
Max. output current       25.0 A       25.0 A       32.0 A       29.2 A       32.0 A       32.0 A         Power factor [cos \$h] / harmonics       1 / < 4 %	AC voltage range	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 \				
Max. output current       25.0 A       25.0 A       32.0 A       29.2 A       32.0 A       32.0 A         Power factor [cos \$h] / harmonics       1 / < 4 %	AC grid frequency			60 Hz /	′ 50 Hz						
Power factor (cos ¢) / harmonics         1 / < 4 %	Max. output current	25.0 A	25.0 A	32.0 A	29.2 A	32.0 A	32.0 A				
Output phases / line connections         1 / 2           Efficiency         97.3 %         97.7 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         97.3 %         97.9 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         96.5 %         97.0 %         %         97.0 %         %         10         10 %         10 %	Power factor (cos φ) / harmonics			1/<	4 %						
Efficiency         97.3 %         97.7 %         97.3 %         97.9 %         97.3 %         97.	Output phases / line connections										
Max. efficiency       97.3 %       97.7 %       97.3 %       97.9 %       97.3 %       97.9 %       97.3 %       97.9 %       97.3 %       97.9 %       97.3 %       97.0 %       96.5 %       97.0 %       96.	Efficiency										
CEC efficiency         96.5 %         97.0 %           Dible pole port wish the monitoring mint (m	,	97.3 %	97.7 %	97.3 %	97.9 %	97.3 %	97.5 %				
Protection devices <ul> <li>Childsconnect device / DC reverse polarity protection</li> <li>Critication of device / DC reverse polarity protection</li> <li>Childsconnect device / DC reverse polarity polarity polarity polarity polarity polareverse polarity polareverse polarity polarity polarity polarity po</li></ul>			97.0 %	96.5 %		96.5 %	97.0 %				
DC disconnect device / DC reverse polarity protection <ul> <li>Ground foult monitoring / Grid monitoring</li> <li>AC short circuit protection</li> <li>AC short circuit protection</li> <li>AC short circuit protection</li> <li>AC short circuit interrupter (AFCI)</li> <li>Frotection class / overvoltage category</li> <li>I / W</li> <li>General data</li> <li>Dimensions (W / H / D) in mm (in)</li> <li>S35 x 730 x 198 (21.1 x 28.5 x 7.8)</li> <li>Reckaging weight</li> <li>S35 x 730 x 198 (21.1 x 28.5 x 7.8)</li> <li>Reckaging weight</li> <li>S00 x 800 x 300 (23.6 x 31.5 x 11.8)</li> <li>Weight / packaging weight</li> <li>S45 dB(A)</li> <li>S45 dB(A)</li> <li>A5 dB</li></ul>											
Ground fault monitoring / Grid monitoring AC short circuit protection Allpole sensitive residual current monitoring unit (RCMU) Ar fault circuit interrupter (AFCI) Protection class / overvoltage category I / IV General data Dimensions (W / H / D) in mm (in) Status (SW / H / D) in mm (in) Status (SW / H / D) in mm (in) Meight / packaging weight Iemperature ronge: operating / non-operating Environmental protection rating Noise emission (typical) Internal protection rating Noise emission (typical) Status (SW / H / D) in mm (in) Status (SW / H / D) (SW	DC disconnect device / DC reverse polarity protection			• /	•						
AC short circuit protection All pole sensitive residual current monitoring unit (RCMU) Arc fault circuit interrupter (AFCI) Arc fault circuit interrupter (AFCI) Fortection class / overvoltage category I / IV General data Dimensions (W / H / D) in mm (in) So 35 x 730 x 198 (21.1 x 28.5 x 7.8) Packaging Dimensions (W / H / D) in mm (in) So 35 x 730 x 198 (21.1 x 28.5 x 7.8) Packaging weight So 2 x 30 x 198 (21.1 x 28.5 x 7.8) Packaging weight So 2 x 30 x 198 (21.1 x 28.5 x 7.8) Packaging weight So 2 x 30 x	· · · · · · ·	•									
Allpole sensitive residual current monitoring unit (RCMU) Arc fault circuit interrupter (AFCI) Protection class / overvoltage category I / IV General data Dimensions (W / H / D) in mm (in) S35 x 730 x 198 (21.1 x 28.5 x 7.8) Packaging Dimensions (W / H / D) in mm (in) S35 x 730 x 198 (21.1 x 28.5 x 7.8) Packaging weight Deckaging weight Category Deckaging weight Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating Protection rating Protection rating Protection rating Noise emission (kpical) Safe x 26 kg (57 lb) / 30 kg (66 lb) Safe x 26 kg (57 lb) / 30 kg (66 lb) Safe x 26 kg (57 lb) / 30 kg (66 lb) Safe x 26 kg (57 lb) / 30 kg (66 lb) Safe x 26 kg (57 lb) / 30 kg (66 lb) Safe x 26 kg (57 lb) / 30 kg (66 lb) Safe x 26 kg (57 lb) / 30 kg (66 lb) Safe x 26 kg (57 lb) / 30 kg (											
Arc fault circuit interrupter (AFCI) Protection class / overvoltage category I / W General data U General data	-										
Protection class / overvoltage category 1 / IV  General data Dimensions (W / H / D) in mm (in) 535 x 730 x 198 (21.1 x 28.5 x 7.8) Packaging Dimensions (W / H / D) in mm (in) 600 x 800 x 300 (23.6 x 31.5 x 11.8) Weight / packaging weight 26 kg (57 lb) / 30 kg (66 lb) Temperature range: operating / non-operating -25°C +60°C / -40°C +60°C Environmental protection rating NEMA 3R Noise emission (typical) 39 dB(A) 45 dB(A) Internal power consumption at night <5 W Topology / cooling concept transformerless / convection transformerless / fan Features Ethernet ports Secure Power Supply Display (2 x 16 characters) 2.4 GHz WLAN / External WLAN antenna ShadeFix technology for string level optimization Cellular (4G / 3G) / Revenue Grade Meter Warranty: 10 / 15 / 20 years Certificates and approvals VI 1741, UL 1741 SA incl. CAR VIE 21 RSD, UL 1998, UL 16998 Ed. 1, IEEE1547, FCC Part 15 (Class A & B.), CAN/CSA V22.2 107.1-1, HECO Rule 21 RSD, UL 1998, UL 16998 Ed. 1, IEEE1547, FCC Part 15 (Class A & B.), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment											
General data         Dimensions (W / H / D) in mm (in)       535 x 730 x 198 (21.1 x 28.5 x 7.8)         Packaging Dimensions (W / H / D) in mm (in)       600 x 800 x 300 (23.6 x 31.5 x 11.8)         Weight / packaging weight       26 kg (57 lb) / 30 kg (66 lb)         Temperature range: operating / non-operating       -25°C +60°C / -40°C +60°C         Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)       45 dB(A)         Internal power consumption at night       <5 W											
Dimensions (W / H / D) in mm (in)       535 x 730 x 198 (21.1 x 28.5 x 7.8)         Packaging Dimensions (W / H / D) in mm (in)       600 x 800 x 300 (23.6 x 31.5 x 11.8)         Weight / packaging weight       26 kg (57 lb) / 30 kg (66 lb)         Temperature range: operating / non-operating       -25°C+60°C / -40°C+60°C         Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)       45 dB(A)         Ihernal power consumption at night       < 5 W				.,							
Packaging Dimensions (W / H / D) in mm (in)       600 x 800 x 300 (23.6 x 31.5 x 11.8)         Weight / packaging weight       26 kg (57 lb) / 30 kg (66 lb)         Temperature range: operating / non-operating       -25°C+60°C / -40°C /+60°C         Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)       45 dB(A)         Internal power consumption at night       <5 W				535 x 730 x 198 (	21.1 x 28.5 x 7.8)						
Weight / packaging weight       26 kg (57 lb) / 30 kg (66 lb)         Temperature range: operating / non-operating       -25°C+60°C / -40°C+60°C         Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)       45 dB(A)         Internal power consumption at night       <5 W											
Temperature range: operating / non-operating       -25°C+60°C / -40°C+60°C         Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)       45 dB(A)         Internal power consumption at night       < 5 W											
Environmental protection rating       NEMA 3R         Noise emission (typical)       39 dB(A)       45 dB(A)         Internal power consumption at night       < 5 W											
Noise emission (typical)       39 dB(A)       45 dB(A)         Internal power consumption at night       < 5 W											
Internal power consumption at night < 5 W Topology / cooling concept transformerless / convection transformerless / fan Features Ethernet ports 2 Secure Power Supply 0 11 Display (2 x 16 characters) 2 2.4 GHz WLAN / External WLAN antenna \ / 0 ShadeFix technology for string level optimization 0 Cellular (4G / 3G) / Revenue Grade Meter 0 / 0 21 Warranty: 10 / 15 / 20 years 0 / 0 / 0 31 Certificates and approvals UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment • Standard features 0 Optional features - Not available \ Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41											
Topology / cooling concept       transformerless / convection       transformerless / fan         Features       Ethernet ports       2         Ethernet ports       2         Secure Power Supply       11         Display (2 x 16 characters)       -         2.4 GHz WLAN / External WLAN antenna       / O         ShadeFix technology for string level optimization       -         Cellular (4G / 3G) / Revenue Grade Meter       -/ O          Warranty: 10 / 15 / 20 years       -/ O          Certificates and approvals       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         • Standard features       - Not available       A subject to availability         Data at nominal conditions       1) Not compatible with SunSpec shutdown devices       2) Standard in SBX.X-1TP-US-41											
Features         Ethernet ports       2         Secure Power Supply       11         Display (2 x 16 characters)       -         2.4 GHz WLAN / External WLAN antenna       / 0         ShadeFix technology for string level optimization       -         Cellular (4G / 3G) / Revenue Grade Meter       0 / 0 21         Warranty: 10 / 15 / 20 years       -         Certificates and approvals       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         • Standard features       • Optional features       - Not available         • Subject to availability       Data at nominal conditions       1) Not compatible with SunSpec shutdown devices											
Ethernet ports       2         Secure Power Supply       1)         Display (2 x 16 characters)       •         2.4 GHz WLAN / External WLAN antenna       / 0         ShadeFix technology for string level optimization       •         Cellular (4G / 3G) / Revenue Grade Meter       0 / 0 2)         Warranty: 10 / 15 / 20 years       • / 0 / 0 3)         Certificates and approvals       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE 1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         • Standard features       • Optional features       – Not available         • Subject to availability       • Subject shutdown devices       2) Standard in SBX.X-1TP-US-41		Inditation menes			liansionne						
Secure Power Supply       1)         Display (2 x 16 characters)       -         2.4 GHz WLAN / External WLAN antenna       / 0         ShadeFix technology for string level optimization       -         Cellular (4G / 3G) / Revenue Grade Meter       0 / 0 2)         Warranty: 10 / 15 / 20 years       -         Certificates and approvals       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         • Standard features       - Not available       A subject to availability         Data at nominal conditions       1) Not compatible with SunSpec shutdown devices       2) Standard in SBX.X-1TP-US-41				2	)						
Display (2 x 16 characters)  2.4 GHz WLAN / External WLAN antenna  A / 0  ShadeFix technology for string level optimization  Cellular (4G / 3G) / Revenue Grade Meter  Warranty: 10 / 15 / 20 years  UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B),  CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment  Standard features 0 Optional features – Not available Subject to availability  Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41	-										
2.4 GHz WLAN / External WLAN antenna       ▲ / ○         ShadeFix technology for string level optimization       ●         Cellular (4G / 3G) / Revenue Grade Meter       ○ / ○ 2)         Warranty: 10 / 15 / 20 years       ● / ○ / ○ 3)         Certificates and approvals       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         ● Standard features       ○ Optional features       – Not available       ▲ Subject to availability         Data at nominal conditions       1) Not compatible with SunSpec shutdown devices       2) Standard in SBX.X-1TP-US-41											
ShadeFix technology for string level optimization <ul> <li>Cellular (4G / 3G) / Revenue Grade Meter</li> <li>( / 0 2)</li> <li>Warranty: 10 / 15 / 20 years</li> <li>( / 0 / 0 3)</li> </ul> Certificates and approvals         UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment           • Standard features         • Optional features         – Not available <ul></ul>											
Cellular (4G / 3G) / Revenue Grade Meter       0 / 0 21         Warranty: 10 / 15 / 20 years       • / 0 / 0 31         Certificates and approvals       UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment         • Standard features       • Optional features       - Not available          Subject to availability         Data at nominal conditions       1) Not compatible with SunSpec shutdown devices       2) Standard in SBX.X-1TP-US-41											
Warranty: 10 / 15 / 20 years <ul> <li>/ 0 / 0 3)</li> <li>UL 1741, UL 1741 SA incl. CA Rule 21 RSD, UL 1998, UL 1699B Ed. 1, IEEE1547, FCC Part 15 (Class A &amp; B), CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment</li> </ul> • Standard features         • Optional features         • Not available         • Subject to availability         Data at nominal conditions         1) Not compatible with SunSpec shutdown devices         2) Standard in SBX.X-1TP-US-41											
Certificates and approvals • Standard features • Optional features - Not available • Standard features 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41											
CAN/CSA V22.2 107.1-1, HECO Rule 14H, PV Rapid Shutdown System Equipment     Standard features Optional features – Not available Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41	, , , ,										
● Standard features ○ Optional features — Not available ▲ Subject to availability Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41	Certificates and approvals										
Data at nominal conditions 1) Not compatible with SunSpec shutdown devices 2) Standard in SBX.X-1TP-US-41	• Standard features • Optional features - Not availa				,	eysion Equipmen					
			,	P-US-41							
	Type designation				/ SB7.0-1TP-US-41	SB7.7-1SP-US-41	/ SB7.7-1TP-US-4				

# THE SMA ENERGY SYSTEM HOME

The SMA Energy System Home combines legendary SMA inverter performance and SunSpec certified shutdown devices in one cost-effective, comprehensive package. In addition, SMA ShadeFix technology optimizes power production and provides greater reliability than alternatives.

This rapid shutdown solution fulfills UL 1741, NEC 2014, and NEC 2017 requirements and is certified to the power line-based SunSpec Rapid Shutdown communication signal over DC wires, making it the most simple and cost-effective rapid shutdown solution on the market.

Visit www.SMA-America.com for more information.







### SIMPLE, FLEXIBLE DESIGN

Speed the completion of customer proposals and maximize the efficiency of your design team with the Sunny Boy-US series, which provides a new level of flexibility in system design by offering:

- » Hundreds of stringing configurations and multiple independent MPPTs
- » SMA's proprietary ShadeFix technology optimizes power production
- » Diverse application options including on- and off-grid compatibility



#1 INVERTER



## VALUE-DRIVEN SALES ENABLEMENT

SMA wants to enable your sales team by arming them with an abundance of feature/ benefit support. Show your customers the value of the Sunny Boy-US series by utilizing:

- » The opportunity to join the SMA PowerUP network of installers who receive in-depth training, enhanced service, and prioritized marketing support
- » SMA's 40 year history and status as the #1 global inverter manufacturer instills homeowners with peace of mind and the long-term security they demand from a PV investment
- » The most economical solution for shade mitigation with superior power production

# IMPROVED STOCKING AND ORDERING

Ensure that your back office business operations run smoothly and succinctly while mitigating potential errors. The Sunny Boy-US series can help achieve cost savings in these areas by providing:

- » An integrated DC disconnect that simplifies equipment stocking and allows for a single inverter part number
- » All communications integrated into the inverter, eliminating the need to order additional equipment





## STREAMLINED INSTALLATION AND COMMISSIONING

Expedite your operations in the field by taking advantage of the new Sunny Boy's installer-friendly feature set including:

- » Direct access via smartphone and utilization of SMA's Installation Assistant, which minimizes time/labor spent in the field and speeds the path to commissioning
- » Simple commissioning and monitoring setup in a single online portal
- » The fastest, easiest installation thanks to SMA ShadeFix and SunSpec certified shutdown devices



## SUPERIOR SERVICE

SMA understands the factors that contribute to lifetime PV ownership cost, that's why the Sunny Boy-US series was designed for maximum reliability and backstopped by an unmatched service offering. Benefit from:

- » SMA Smart Connected, a proactive service solution integrated into Sunny Portal that automatically detects errors and initiates the repair and replacement process
- » The SMA Service Mobile App, which provides simplified, expedited field service