

| Technical Data                        | AF1K-SL-1                                                                                | AF1.5K-SL-1 | AF2K-SL-1   | AF2.5K-SL-1 | AF3K-SL-1   | AF3.6K-SL-1 |
|---------------------------------------|------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|
| PV Input                              |                                                                                          |             |             |             |             |             |
| Max. Input Power (kW)                 | 1.5                                                                                      | 2.3         | 3.0         | 3.8         | 4.5         | 5.4         |
| Max. PV Voltage (V)                   | 550                                                                                      |             |             |             |             |             |
| MPPT Range (V)                        | 80 - 500                                                                                 |             |             |             |             |             |
| Full MPPT Range (V)                   | 80 - 500                                                                                 | 90 - 500    | 120 - 500   | 150 - 500   | 170 - 500   | 210 - 500   |
| Normal Voltage (V)                    | 360                                                                                      |             |             |             |             |             |
| Startup Voltage (V)                   | 100                                                                                      |             |             |             |             |             |
| Max. Input Current (A)                | 18.5 x 1                                                                                 |             |             |             |             |             |
| Max. Short Current (A)                | 26 x 1                                                                                   |             |             |             |             |             |
| No. of MPP Tracker / No. of PV String | 1 / 1                                                                                    |             |             |             |             |             |
| Battery Port                          |                                                                                          |             |             |             |             |             |
| Max. Charge/Discharge Power (kW)      | 1.0                                                                                      | 1.5         | 2.0         | 2.5         | 3.0         | 3.6         |
| Max. Charge/Discharge Current (A)     | 25                                                                                       | 40          | 50          | 63          | 80          | 80          |
| Battery Normal Voltage (V)            | 51.2                                                                                     |             |             |             |             |             |
| Battery Voltage Range (V)             | 40 - 60                                                                                  |             |             |             |             |             |
| Battery Type                          | Li-ion / Lead-acid etc.                                                                  |             |             |             |             |             |
| AC Grid                               |                                                                                          |             |             |             |             |             |
| Max Continuous Current (A)            | 5.0                                                                                      | 7.0         | 10.0        | 12.0        | 14.0        | 17.0        |
| Max Continuous Power (kVA)            | 1.0                                                                                      | 1.5         | 2.0         | 2.5         | 3.0         | 3.6         |
| Nominal Grid Current (A)              | 4.6 / 4.4                                                                                | 6.9 / 6.6   | 9.1 / 8.7   | 11.4 / 10.9 | 13.7 / 13.1 | 16.4 / 15.7 |
| Nominal Grid Voltage (V)              | 198 to 242 @ 220 / 207 to 253 @ 230                                                      |             |             |             |             |             |
| Nominal Grid Frequency (Hz)           | 50 / 60                                                                                  |             |             |             |             |             |
| Power Factor                          | 0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)                              |             |             |             |             |             |
| Current THD (%)                       | < 3                                                                                      |             |             |             |             |             |
| AC Load Output                        |                                                                                          |             |             |             |             |             |
| Max Continuous Current (A)            | 5.0                                                                                      | 7.0         | 10.0        | 12.0        | 14.0        | 17.0        |
| Max Continuous Power (kVA)            | 1.0                                                                                      | 1.5         | 2.0         | 2.5         | 3.0         | 3.6         |
| Max Peak Current (A) (10min)          | 6.9 / 6.6                                                                                | 10.5 / 10.0 | 13.7 / 13.1 | 17.3 / 16.6 | 20.5 / 19.6 | 24.6 / 23.5 |
| Max Peak Power (kVA) (10min)          | 1.5                                                                                      | 2.3         | 3.0         | 3.8         | 4.5         | 5.4         |
| Nominal AC Voltage L-N (V)            | 220 / 230                                                                                |             |             |             |             |             |
| Nominal AC Frequency (Hz)             | 50 / 60                                                                                  |             |             |             |             |             |
| Switching Time (ms)                   | Seamless                                                                                 |             |             |             |             |             |
| Voltage THD (%)                       | < 3                                                                                      |             |             |             |             |             |
| Efficiency                            |                                                                                          |             |             |             |             |             |
| CEC Efficiency (%)                    | 97.0                                                                                     |             |             |             |             |             |
| Max. Efficiency (%)                   | 97.6                                                                                     |             |             |             |             |             |
| PV to Bat. Efficiency (%)             | 98.1                                                                                     |             |             |             |             |             |
| Bat. between AC Efficiency (%)        | 96.8                                                                                     |             |             |             |             |             |
| Protection                            |                                                                                          |             |             |             |             |             |
| PV Reverse Polarity Protection        | Yes                                                                                      |             |             |             |             |             |
| Over Current/Voltage Protection       | Yes                                                                                      |             |             |             |             |             |
| Anti-Islanding Protection             | Yes                                                                                      |             |             |             |             |             |
| AC Short Circuit Protection           | Yes                                                                                      |             |             |             |             |             |
| Residual Current Detection            | Yes                                                                                      |             |             |             |             |             |
| Ground Fault Monitoring               | Yes                                                                                      |             |             |             |             |             |
| Insulation Resister Detection         | Yes                                                                                      |             |             |             |             |             |
| PV Arc Detection                      | Yes                                                                                      |             |             |             |             |             |
| Enclosure Protect Level               | IP65 / NEMA4X                                                                            |             |             |             |             |             |
| General Data                          |                                                                                          |             |             |             |             |             |
| Dimensions (W x H x D, mm)            | 370 x 535 x 192                                                                          |             |             |             |             |             |
| Weight (kg)                           | 18.5                                                                                     |             |             |             |             |             |
| Topology                              | Transformerless                                                                          |             |             |             |             |             |
| Cooling                               | Intelligent Fan                                                                          |             |             |             |             |             |
| Relative Humidity                     | 0 - 100 %                                                                                |             |             |             |             |             |
| Operating Temperature Range (°C)      | - 25 to 60                                                                               |             |             |             |             |             |
| Operating Altitude (m)                | < 4000                                                                                   |             |             |             |             |             |
| Noise Emission (dB)                   | < 25                                                                                     |             |             |             |             |             |
| Standby Consumption (W)               | < 10                                                                                     |             |             |             |             |             |
| Mounting                              | Wall Bracket                                                                             |             |             |             |             |             |
| Communication with RSD                | SUNSPEC                                                                                  |             |             |             |             |             |
| Display & Communication Interfaces    | LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G                                                    |             |             |             |             |             |
| Certification & Approvals             | NRS097, G98, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2 |             |             |             |             |             |
| EMC                                   | EN61000-6-2, EN61000-6-3                                                                 |             |             |             |             |             |

| Technical Data                        | AF3K-SL                                                                                      | AF3.6K-SL   | AF4K-SL     | AF4.6K-SL       | AF5K-SL     | AF5.5K-SL   | AF6K-SL     |
|---------------------------------------|----------------------------------------------------------------------------------------------|-------------|-------------|-----------------|-------------|-------------|-------------|
| PV Input                              |                                                                                              |             |             |                 |             |             |             |
| Max. Input Power (kW)                 | 4.5                                                                                          | 5.4         | 6.0         | 6.9             | 7.5         | 8.3         | 9.0         |
| Max. PV Voltage (V)                   |                                                                                              |             |             | 550             |             |             |             |
| MPPT Range (V)                        |                                                                                              |             |             | 80 - 500        |             |             |             |
| Full MPPT Range (V)                   | 90 - 500                                                                                     | 110 - 500   | 120 - 500   | 130 - 500       | 150 - 500   | 160 - 500   | 170 - 500   |
| Normal Voltage (V)                    |                                                                                              |             |             | 360             |             |             |             |
| Startup Voltage (V)                   |                                                                                              |             |             | 100             |             |             |             |
| Max. Input Current (A)                |                                                                                              |             |             | 18.5 x 2        |             |             |             |
| Max. Short Current (A)                |                                                                                              |             |             | 26 x 2          |             |             |             |
| No. of MPP Tracker / No. of PV String |                                                                                              |             |             | 2 / 2           |             |             |             |
| Battery Port                          |                                                                                              |             |             |                 |             |             |             |
| Max. Charge/Discharge Power (kW)      | 3.0                                                                                          | 3.6         | 4.0         | 4.6             | 4.8         | 4.8         | 4.8         |
| Max. Charge/Discharge Current (A)     |                                                                                              |             |             | 80              |             |             |             |
| Battery Normal Voltage (V)            |                                                                                              |             |             | 51.2            |             |             |             |
| Battery Voltage Range (V)             |                                                                                              |             |             | 40 - 60         |             |             |             |
| Battery Type                          | Li-ion / Lead-acid etc.                                                                      |             |             |                 |             |             |             |
| AC Grid                               |                                                                                              |             |             |                 |             |             |             |
| Max Continuous Current (A)            | 14.0                                                                                         | 17.0        | 19.0        | 22.0            | 23.0        | 26.0        | 28.0        |
| Max Continuous Power (kVA)            | 3.0                                                                                          | 3.6         | 4.0         | 4.6             | 5.0         | 5.5         | 6.0         |
| Nominal Grid Current (A)              | 13.7 / 13.1                                                                                  | 16.4 / 15.7 | 18.2 / 17.4 | 21.0 / 20.0     | 22.8 / 21.8 | 25.0 / 24.0 | 27.3 / 26.1 |
| Nominal Grid Voltage (V)              | 198 to 242 @ 220 / 207 to 253 @ 230                                                          |             |             |                 |             |             |             |
| Nominal Grid Frequency (Hz)           | 50 / 60                                                                                      |             |             |                 |             |             |             |
| Power Factor                          | 0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)                                  |             |             |                 |             |             |             |
| Current THD (%)                       | < 3                                                                                          |             |             |                 |             |             |             |
| AC Load Output                        |                                                                                              |             |             |                 |             |             |             |
| Max Continuous Current (A)            | 14.0                                                                                         | 17.0        | 19.0        | 22.0            | 23.0        | 26.0        | 28.0        |
| Max Continuous Power (kVA)            | 3.0                                                                                          | 3.6         | 4.0         | 4.6             | 5.0         | 5.5         | 6.0         |
| Max Peak Current (A) (10min)          | 20.5 / 19.6                                                                                  | 24.6 / 23.5 | 27.3 / 26.1 | 31.4 / 30       | 34.1 / 32.7 | 37.8 / 36.1 | 41.0 / 39.2 |
| Max Peak Power (kVA) (10min)          | 4.5                                                                                          | 5.4         | 6.0         | 6.9             | 7.5         | 8.3         | 9.0         |
| Nominal AC Voltage L-N (V)            |                                                                                              |             |             | 220 / 230       |             |             |             |
| Nominal AC Frequency (Hz)             |                                                                                              |             |             | 50 / 60         |             |             |             |
| Switching Time (ms)                   |                                                                                              |             |             | Seamless        |             |             |             |
| Voltage THD (%)                       |                                                                                              |             |             | < 3             |             |             |             |
| Efficiency                            |                                                                                              |             |             |                 |             |             |             |
| CEC Efficiency (%)                    |                                                                                              |             |             | 97.0            |             |             |             |
| Max. Efficiency (%)                   |                                                                                              |             |             | 97.6            |             |             |             |
| PV to Bat. Efficiency (%)             |                                                                                              |             |             | 98.1            |             |             |             |
| Bat. between AC Efficiency (%)        |                                                                                              |             |             | 96.8            |             |             |             |
| Protection                            |                                                                                              |             |             |                 |             |             |             |
| PV Reverse Polarity Protection        |                                                                                              |             |             | Yes             |             |             |             |
| Over Current/Voltage Protection       |                                                                                              |             |             | Yes             |             |             |             |
| Anti-Islanding Protection             |                                                                                              |             |             | Yes             |             |             |             |
| AC Short Circuit Protection           |                                                                                              |             |             | Yes             |             |             |             |
| Residual Current Detection            |                                                                                              |             |             | Yes             |             |             |             |
| Ground Fault Monitoring               |                                                                                              |             |             | Yes             |             |             |             |
| Insulation Resister Detection         |                                                                                              |             |             | Yes             |             |             |             |
| PV Arc Detection                      |                                                                                              |             |             | Yes             |             |             |             |
| Enclosure Protect Level               |                                                                                              |             |             | IP65 / NEMA4X   |             |             |             |
| General Data                          |                                                                                              |             |             |                 |             |             |             |
| Dimensions (W x H x D, mm)            |                                                                                              |             |             | 370 x 535 x 192 |             |             |             |
| Weight (kg)                           | 18.5                                                                                         |             |             |                 | 20.5        |             |             |
| Topology                              |                                                                                              |             |             | Transformerless |             |             |             |
| Cooling                               |                                                                                              |             |             | Intelligent Fan |             |             |             |
| Relative Humidity                     |                                                                                              |             |             | 0 - 100 %       |             |             |             |
| Operating Temperature Range (°C)      |                                                                                              |             |             | - 25 to 60      |             |             |             |
| Operating Altitude (m)                |                                                                                              |             |             | < 4000          |             |             |             |
| Noise Emission (dB)                   |                                                                                              |             |             | < 25            |             |             |             |
| Standby Consumption (W)               |                                                                                              |             |             | < 10            |             |             |             |
| Mounting                              |                                                                                              |             |             | Wall Bracket    |             |             |             |
| Communication with RSD                |                                                                                              |             |             | SUNSPEC         |             |             |             |
| Display & Communication Interfaces    | LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G                                                        |             |             |                 |             |             |             |
| Certification & Approvals             | NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2 |             |             |                 |             |             |             |
| EMC                                   | EN61000-6-2, EN61000-6-3                                                                     |             |             |                 |             |             |             |