Product Selection Guide



Genasun Buck Charge Controllers

| | GV-4 | GV-5 | GV-5-MOD | GV-10 |
|---|-----------------------|-----------------------|---------------------------------------|-----------------------|
| Technology: | MPPT Buck | MPPT Buck | MPPT Buck | MPPT Buck |
| Battery Nominal Voltage (lead-acid versions): | 12 V | 12 V | 12 V | 12 V |
| Battery Voltage Configuration (lithium versions): | - | 35/45 | 3S and 4S ⁽¹⁾ | 35/45 |
| Charge Profile: | Muti-Stage Lead-Acid | Muti-Stage l | Lead-Acid, CC/CV (default) or Multi-S | tage Lithium |
| Recommended Panel Power:2 | 50 W | 50 W - 75 W | 50 W - 75 W | 120 W - 160 W |
| Recommended Max Panel Voc at STC: | 22 V | 22 V | 22 V | 27 V |
| Rated Battery Current: | 4 A | 5 A | 5 A | 10.5 A |
| Trickle Charge to Recover Dead (OV) Battery: | - | Yes | Yes | (3) |
| Load Output: | - | 5 A with LVD | 5 A with LVD | - |
| Genasun Overdrive:4 | - | Yes | Yes | - |
| Environmental Protection: | IP 40 | IP 40 | IP 00 (Board) | IP 40 |
| Certifications: | cETLus, CE, FCC, RoHS | cETLus, CE, FCC, RoHS | cETLus, CE, FCC, RoHS | cETLus, CE, FCC, RoHS |
| Warranty: | 5 years | 10 years | 10 years | 5 years |

⁽¹⁾ Dual firmware selectable by user.

MPPT Buck (step-down) ↓

GV-4, GV-5, GV-5-MOD, GV-10

GENASUN GV-5lead-acid

NPT SUAD CLARAC CONTROLLER

12 V nominal, 36-cell panel

12 V nominal battery



⁽²⁾ Recommended Panel Power based on the battery chemistry and configuration. See manual for more info.

⁽³⁾ Kit BootStrap (ask for information).

⁽⁴⁾ Genasun Overdrive: adaptive power-limiting technology allow the use of solar arrays which exceed the controllers rated power. See manual for more info.

Product Selection Guide



Genasun Boost Charge Controllers

| | GVB-8 | GVB-8-WP |
|---|--|--|
| Technology: | MPPT Boost | MPPT Boost |
| Battery Nominal Voltage (lead-acid versions): | 12 V / 24 V / 36 V / 48 V | 12V / 24V / 36V / 48V |
| Battery Voltage Configuration (lithium versions): | from 4S to 16S | from 4S to 16S |
| Charge Profile: | Muti-Stage Lead-Acid, CC/CV (default) or Multi-Stage Lithium | Muti-Stage Lead-Acid, CC/CV or Multi-Stage Lithium |
| Recommended Panel Power: | 105 W / 210 W / 325 W/ 350 W | 105 W / 210 W / 325 W/ 350 W |
| Recommended Max Panel Vmp at STC: | 13 V / 26 V / 41 V / 43 V | 13 V / 26 V/ 41 V / 43 V |
| Recommended Max Panel Voc at STC: | 50 V | 50 V |
| Minimuna Panel Input Voltage: | 5 V | 5 V |
| Rated Panel Input Current:5 | 8 A | 8 A |
| Max Battery Charge Voltage: | 60 V | 60 V |
| Trickle Charge to Recover Dead (OV) Battery: | Yes | Yes |
| Environmental Protection: | IP 40 | IP 68 (Waterproof) |
| Certifications: | cETLus, CE, FCC, RoHS | CE, FCC, RoHS |
| Warranty: | 5 years | 5 years |

⁽⁵⁾ Panel ratings have increased since we designed the GVB. Although we don't believe in changing specifications without a corresponding engineering change, based on both our customers' experiences over the years as well as the headroom we designed into the GVB, we feel comfortable recommending the GVB for panels with Imp up to 9A.

GVB-8, GVB-8-WP GENASUN GVB-8 (Boost) Red-acid GENASUN GVB-8

