

Smart Battery Charger

GSCH4000A-E01



SIGLENT TECHNOLOGIES CO.,LTD



1.Introduction

1.1 Scope

This specification will describe the physical, functional and electrical characteristics of the GSCH4000A Smart battery standard charger provided by SIGLENT TECHNOLOGIES CO.,LTD



2. Specification

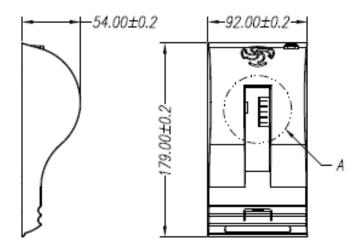
2.1 GSCH4000A specification

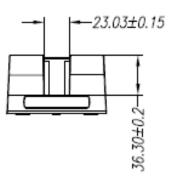
| 9-26V DC Yoltage range (The input voltage should be more Harrie Solvabove the limit charging voltage of the charged battery) Power 250W Power 250W Interface 21qx5 5qbC Output 0 Voltage range 0.17V DC Charge power 67W max. Charge power 67W max. Compunications System Management Bus Rev 1.0:::::::::::::::::::::::::::::::::::: | Input | | | | |
|--|---------------------------|---|-----------------|--|--|
| of the charged battery) Power ≥50W Interface 2.1qx5.5qDC Output | | | | | |
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| Interface 2.1φx5.5φDC Output Voltage range 0-17V DC Charge power 67W max. Standard battery connector Interface 5-blade standard battery connector Communication S System Management Bus Rev 1.0,Smart Battery Data Specification Rev Communications System Management Bus Rev 1.0,Smart Battery Data Specification Rev Compliances Communications System Management Bus Rev 1.0,Smart Battery Data Specification Rev Compliance Communications System Management Bus Rev 1.0,Smart Battery Data Specification Rev Compliance Communications System Management Bus Rev 1.0,Smart Battery Charge Specification Rev 1.0 compliant System Management Bus Rev 1.0,Smart Battery Charge Specification Rev 1.0 compliant Environmental Over temperature, Over current, Over Vortage, Short circuit Storage Ambient Temperature Operation Storage Ambient Temperature O°C to 40°C -30°C to 80°C Humidity(non-condensing) 20% to 90% RH 10% to 95% RH Dimensions(L*W*H) 180*92*54mm(±0.3mm) | | of the charged battery) | | | |
| OutputVoltage range0-17V DCCharge power67W max.Interface5-blade standard battery connectorCommunicationsSystem Management Bus Rev 1.0,Smart Battery Data Specification RevCompliances1.0 and Smart Battery Charger Specification Rev 1.0 compliantEfficiency>85%ProtectionOver temperature, Over current, Over Voltage, Short circuitEnvironmental0°C to 40°CGoperationStorageAmbient Temperature0°C to 40°C40°C to 80°C Humidity(non-condensing)20% to 90% RH0°C to 40°C-30°C to 80°CHumidity(non-condensing)20% to 90% RH10°n ensions(L*W*H)180°92*54mm(±0.3mm)Weight235gLED IndicationsCharger is ready for useGreen blinkingCharging modeGreen lightCharging complete, The battery can be removed for useRed lightFailure mode, AC power supply error battery is damagedSafety & EMCVergenRegulatory approvalsEuropeElectromagnetic EmissionEuropeElectromagnetic EmissionEuropeElectromagneti | Power | ≥50W | ≥50W | | |
| Voltage range0-17V DCCharge power67W max.Interface5-blade standard battery connectorCommunicationsSystem Management Bus Rev 1.0,Smart Battery Data Specification RevCompliances1.0 and Smart Battery Charger Specification Rev 1.0 compliantEfficiency>85%ProtectionOver temperature, Over current, Over Voltage, Short circuitEnvironmentalOperationCompliances0°C to 40°CAmbient Temperature0°C to 40°CO'C to 40°C-30°C to 80°CHumidity(non-condensing)20% to 90% RH0°C to 80°C-30°C to 80°CHumidity(non-condensing)20% opo% RH0°C to 40°C-30°C to 80°CHumidity(non-condensing)20% opo% RH0°C to 40°C-30°C to 80°CHumidity(non-condensing)20% opo% RH0°C to 80°C-50°C to 80°CHumidity(non-condensing)20% opo% RH0°C to 80°C-50°C to 80°CBille light180*92*54mm(±0.3mm)Veright235gEleb Indications-50°C to 80°CGreen blinkingCharger is ready for useGreen lightCharging modeGreen lightCharging complete, The battery can be removed for useRed lightFailure mode, AC power supply errorSafety & ELMC-50°CSafety & ELMC-50°CElectromagnetic EmissionEuropeElectromagnetic EmissionEuropeFinder EmissionEuropeSafety & ELMC-50°CSafety & Electromagneti | Interface | 2.1 φx5.5 φDC | | | |
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| Efficiency >85% Protection Over temperature, Over current, Over current, Over circuit Environmental Environmental Mobient Temperature 0°C to 40°C -30°C to 80°C Humidity(non-condensing) 20% to 90% RH 10% to 95% RH Mechanical 20% to 90% RH 10% to 95% RH Dimensions(L*W*H) 180°92°54mm(±0.3mm) EV Weight 235g EV LED Indications Storage C Blue light Charger is ready for use EV Green blinking Charging mode EV Green light Charging complete, The battery can bettery is damaged Safety & EMC Europe CE Regulatory approvals Europe CE Electromagnetic Emissions Europe Storage | Communications | System Management Bus Rev 1.0, Smart Battery Data Specification Rev | | | |
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| Image: Probability of the strength of the stre | Protection | Over temperature, Over current, Over Voltage, Short circuit | | | |
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| MechanicalDimensions(L*W*H)180*92*54mm(±0.3mm)Weight235gLED IndicationsBlue lightCharger is ready for useGreen blinkingCharging modeGreen lightCharging complete, The battery can be removed for useRed lightFailure mode, AC power supply error or battery is damagedSafety & EMCEuropeRegulatory approvalsEuropeElectromagnetic EmissionsEuropeElectromagnetic EmissionsElectromagnetic Emissions | Ambient Temperature | 0℃ to 40℃ | -30℃ to 80℃ | | |
| Dimensions(L*W*H)180*92*54mm(±0.3mm)Weight235gLED IndicationsBlue lightCharger is ready for useGreen blinkingCharging modeGreen lightCharging complete, The battery can be removed for useRed lightFailure mode, AC power supply error battery is damagedSafety & EMCEuropeRegulatory approvalsEuropeElectromagnetic EmissionsEuropeEuropeEuropeSuffer Suffer S | Humidity(non-condensing) | 20% to 90% RH | 10% to 95% RH | | |
| Weight235gLED IndicationsBlue lightCharger is ready for useBlue lightCharging modeGreen blinkingCharging complete, The battery can be removed for useGreen lightCharging complete, The battery can be removed for useRed lightFailure mode, AC power supply error battery is damagedSafety & EMCRegulatory approvalsEuropeCEUSAElectromagnetic EmissionsEuropeEuropeEN55032 class B | Mechanical | | | | |
| LED IndicationsBlue lightCharger is ready for useGreen blinkingCharging modeGreen lightCharging complete, The battery can be removed for useRed lightFailure mode, AC power supply error battery is damagedSafety & EMCEuropeRegulatory approvalsEuropeCEUSAEuropeFCCEuropeEuropeEuropeEuropeEuropeEN55032 class B | Dimensions(L*W*H) | 180*92*54mm(±0.3mm) | | | |
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| Green blinking Charging mode Green light Charging complete, The battery can be removed for use Red light Failure mode, AC power supply error battery is damaged Safety & EMC Europe CE Regulatory approvals Europe FCC Electromagnetic Emissions Europe EN55032 class B | LED Indications | | | | |
| Green light Charging complete, The battery can be removed for use Red light Failure mode, AC power supply error battery is damaged Safety & EMC Europe CE Regulatory approvals Europe FCC Electromagnetic Emissions Europe EN55032 class B | Blue light | Charger is ready for use | | | |
| Red light Failure mode, AC power supply error or battery is damaged Safety & EMC Europe CE Regulatory approvals Europe FCC USA Europe EN55032 class B | Green blinking | Charging mode | | | |
| Safety & EMC Europe CE Regulatory approvals Europe FCC USA FCC Electromagnetic Emissions Europe | Green light | Charging complete, The battery can be removed for use | | | |
| Regulatory approvals Europe CE USA FCC Electromagnetic Emissions Europe Europe EN55032 class B | Red light | Failure mode, AC power supply error or battery is damaged | | | |
| Electromagnetic Emissions Europe FCC | Safety & EMC | | | | |
| Electromagnetic Emissions | Regulatory approvals | Europe | CE | | |
| Electromagnetic Emissions | | USA | FCC | | |
| USA FCC15 class B | Electromagnetic Emissions | Europe | EN55032 class B | | |
| | | USA | FCC15 class B | | |



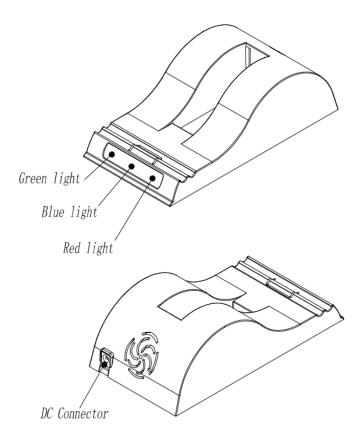
| Electromagnetic Immunity | ESD immunity | EN/IEC61000-4-2 |
|--------------------------|--|------------------|
| | Electromagnetic field immunity | EN/IEC61000-4-3 |
| | EFT / Burst | EN/IEC61000-4-4 |
| | Surge | EN/IEC61000-4-5 |
| | Conducted Immunity | EN/IEC61000-4-6 |
| | Magnetic Fields | EN/IEC61000-4-8 |
| | Voltage dips, short instrumentations & | EN/IEC61000-4-11 |
| | voltage variations | |
| | | |

3.Mechanical











4.Safety

- 1.Do not expose the charger or power supply to water or liquids!
- 2. When charging, make sure the battery is fully connected to the charger connector!
- 3.Use only the manufacturer's power supply and observe terminal polarity!
- 4.Do not cover the air vent or obstruct the airflow, this will cause overheating!
- 5.Do not open the charger or power supply case!



About SIGLENT

SIGLENT is an international high-tech company, concentrating on R&D, sales, production and services of electronic test & measurement instruments.

SIGLENT first began developing digital oscilloscopes independently in 2002. After more than a decade of continuous development, SIGLENT has extended its product line to include digital oscilloscopes, isolated handheld oscilloscopes, function/arbitrary waveform generators, RF/MW signal generators, spectrum analyzers, vector network analyzers, digital multimeters, DC power supplies, electronic loads and other general purpose test instrumentation. Since its first oscilloscope was launched in 2005, SIGLENT has become the fastest growing manufacturer of digital oscilloscopes. We firmly believe that today SIGLENT is the best value in electronic test & measurement.

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