

SPECIFICATION FOR APPROVAL

| MODEL NUMBER | HDP-QB05010U |
|-------------------|--|
| PART NUMBER | HDP-QB-0005 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters |
| CUSTOMER PART NO. | |
| REVISION | A3 |
| DATE | Mar15, 2022 |

| CUSTOMER APPROVAL | DATE | |
|-------------------|------|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

HDP Power – a SEACOMP company 2546 Gateway Road Carlsbad, California 9200

Tel: 1.760.438.9600 Email: sales@seacomp.com Website: www.hdp-power.com



| MODEL NUMBER | HDP-QB05010U | PAGE | 1 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

Contents

| Con | tents | 1 |
|-----|---------------------------------------|----|
| Rev | ision History | 2 |
| 1 | Scope | 3 |
| 2 | Quality Requirements | 3 |
| 2.1 | Product Specific Quality Requirements | 3 |
| 2.2 | General Quality Requirements | 6 |
| 3 | Electrical Characteristics | 8 |
| 3.1 | Input | 8 |
| 3.2 | Output | 8 |
| 3.3 | Cable & Connector | 9 |
| 4 | Cosmetic | 10 |
| 4.1 | Surface Definitions | 10 |
| 4.2 | Inspection Conditions | 10 |
| 4.3 | Cosmetic Defect Definitions | 11 |
| 4.4 | Size / Weight: | 13 |
| 4.5 | EU Adapter (IEC Type-C) | 14 |
| 4.6 | UK Adapter (IEC Type-G) | 15 |
| 4.7 | AU Adapter (IEC Type-I) | 16 |
| 5 | Electromagnetic Compatibility | 17 |
| 6 | Labeling | 18 |
| 6.1 | Labeling the Device | 18 |
| 6.2 | Label Drawing | 18 |
| 7 | Packaging | 19 |
| 7.1 | Drawing | 19 |
| 7.2 | Safety Manual | 21 |
| 7.3 | Packaging Test | 21 |
| 8 | Warranty | 21 |



| MODEL NUMBER | HDP-QB05010U | PAGE | 2 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

Revision History

| REV | DESCRIPTION | DATE |
|-----|---|--------------|
| A0 | Initial Release | Jul 31 2017 |
| A1 | Corrected testing parameters in 2.1.1.1 Paint and Print Test: - Removed "Test fabric: Linen"; - Updated Wiping cycles from "10,000" to "1,000"; - Updated Contact pressure from "250cN" to "1N ±0.2N". | Nov 21, 2017 |
| A2 | Removed FMEA in section 2.2.2.3. | Aug 27, 2018 |
| | Updated pad print artwork in section 6.2. | |
| A3 | Adding printed safety manual, modifying label content, modifying packing drawing | Mar15, 2022 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| 1.760.438.9600 | www.hdp-power.com | sales@seacomp.com |
|----------------|-------------------|-------------------|
|----------------|-------------------|-------------------|



| MODEL NUMBER | HDP-QB05010U | PAGE | 3 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

1 Scope

The device is a 5 Watt AC to DC switching adapter designed to provide a constant power source for electrical products. This adapter is certified for informational technology equipment (ITE) applications.

2 Quality Requirements

2.1 Product Specific Quality Requirements

2.1.1 Mechanical / Electrical Requirements

2.1.1.1 Paint and Print Test

In accordance with EN 60068-2-70

The printings have to withstand the testing procedures without any restrictions.

Test liquid Mineral oils (example: Baby oil)

Wiping cycles 1,000 Contact pressure 1N ±0.2N

2.1.1.2 Mechanical and Electrical Reliability

All electrical contacts and mechanically moving parts have to withstand a stress test of at least 3,000 simulated connecting cycles without any damage. After the test, the device must have 100% functionality. Connectors must comply with the manufacturer's requirements or relevant standards at minimum.

2.1.1.3 Cable Tension and Flex

All cable joints and strain relief points have to pass the following:

Static load: 5Kg / 1 min at 0 degree and at 90 degree angles

Flex test: +/- 60 degree bending angle 250gm at 20cycle / minute with a minimum

speed of 1000 cycles.

2.1.1.4 Drop Test

This test requires the device to be dropped from a height of 1 meter onto a concrete floor. The drop should cover all surfaces including the 2 edges and all 4 corners. After the test, the device should have 100% functionality. There should not be any cracks, breaks or damage to any surface or have any loose internal components. Additionally, the ultrasonic weld joint should still be intact with minimum 80% coverage.

2.1.1.5 Enclosure Crush Test

This test applies a uniformly distributed weight of 250 Newtons on all surfaces for 5 seconds per surface. There should be no physical damage or effect on the products performance (i.e. operating folding AC blade, easy insertion of international adapters, snug USB connector fit).

2.1.1.6 Cable Burn Test (to be tested by safety lab)

In accordance with DIN 75200

Burn down speed max. 50 mm/min

UL rated cable with UL file is an acceptable replacement for this test. Cable to be VW-1 rated.



| MODEL NUMBER | HDP-QB05010U | PAGE | 4 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

2.1.2 Climate Requirements

2.1.2.1 Temperature Range

Full Functionality 0°C up to +50°C Storage Temperature -20°C up to +85°C

2.1.2.2 Thermal Shock (operational)

Low Temperature

High Temperature

T / t

Cycle Duration

Number of Cycles

0°C (AC/DC)

50°C (AC/DC)

15°C/min

1 hour

10

Mode of Operation Minimum 75% full load

Requirement 100% functionality after test, without any damages or

physical change

2.1.2.3 Thermal Shock (non-operating)

Low Temperature -20°C
High Temperature +85°C
T / t 15°C/min
Cycle Duration 1 hour
Number of Cycles 10

Mode of Operation Switched off

Requirement 100% functionality after test, without any damages or

physical change

2.1.2.4 Thermal Aging

Temperature -20°C and +85°C

Duration 96 hours at each temperature

Mode of Operation Power off

Requirement 100% functionality after test, without any damages or

physical change

2.1.2.5 Humidity (non-condensing)

Temperature +45°C Humidity 95% Duration 96 hours

Mode of Operation Power up no load

Requirement 100% functionality after test, without any damages or

physical change

2.1.2.6 Humidity (condensing)

Upper Temperature +45°C Lower Temperature +25°C Humidity 95%

Test Cycle 5°C / max ramp rate

Duration 96 hours

Number of cycles 6

Mode of Operation Non Operational

Requirement 100% functionality after test, without any damages or

physical change



| MODEL NUMBER | HDP-QB05010U | PAGE | 5 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

2.1.2.7 Salt SprayFollow ASTM B117 standard with the possible exceptions listed below.

35°C + 1.1 / - 1.7°C Temperature

Salt Solution 5%+/-1 Salt solution (NaCl) in Distilled or D1193 Type IV water

РΗ 6.5 - 7.2

Fog Rate Duration 1m - 2 mL / hr / 80sq.cm

24 hours



| MODEL NUMBER | HDP-QB05010U | PAGE | 6 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

2.2 General Quality Requirements

2.2.1 Product Related Requirements

2.2.1.1 General Appearance

Follows cosmetic requirements listed in Section 4 of this specification.

2.2.1.2 Emissions

The device must not produce any nuisance or unhealthy smell. A certificate must be made available proving the use of harmless materials.

2.2.1.3 Product Safety

The product has to comply with the relevant requirements listed in IEC 60950 and IEC62368 (ITE).

Normal usage of the product must not result in any danger. In particular, any broken component parts, including electric components, may not result in any risk or danger of injury to the user. This is to be proven by a risk analysis during the product's development phase. Any potential hazard has to be indicated clearly in the user manual.

During normal use at an ambient temperature of 25°C, the housing (made of synthetic material) may warm up by 50K. Therefore, the maximum temperature of the parts could be as high as 75°C.

Individual "Hot Spots" (maximum size of 2 cm²) is acceptable if they are not located in the grip area. A warm up by 60K is acceptable in these "Hot Spots." Therefore, the maximum temperature of these parts could be 85°C.

For both normal use and "Hot Spot" instances, the housing must not exceed the maximum temperature of the applied synthetic.

When using tantalum capacitors, the effects of a potential explosion must be reduced to prevent any hazard to the user's health.

Protective actions against confusing the poles of the electric connectors have to be taken for any internal parts or connectors with specific polarity.

Transportation, storage, and operation of the adapter must not create any hazard, personal injury or any material damage. This is guaranteed through the controllable quality of workmanship and material used.

It must be guaranteed that after contact with natural oils, the housing material's performance does not result in any dangerous situations to the customer.

2.2.1.4 Recycling and Environmental Compatibility

Must comply with RoHS and REACH.

Quality Level, (AQL)
In accordance with DIN ISO 2859 Part 1

General test-level II
Critical defects AQL 0
Major defects AQL 0.4
Minor defects AQL 0.65



| MODEL NUMBER | HDP-QB05010U | PAGE | 7 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

2.2.2 Supplier Related Requirements

2.2.2.1 Demonstration of Quality

The supplier is obliged to maintain a quality assurance system which covers R&D and production specific items. This system must meet the requirements of ISO 9000-2008. A quality assurance plan (QA plan) is required for a project-specific proof of quality-assuring measures. The plan should be made available and presented upon request.

For the development phase, the QA plan needs to define milestones as proof of the reliability prognoses. The development results and the release by the customer need to also be included in this plan.

For the production phase, the QA plan has to focus on the detailed verification of all the planned QA steps from component procurement to delivery. Any acceptance or error criteria to be applied to the QA plan must meet the process capability index as defined in this specification.

2.2.2.2 Process Assurance

The quality capability has to be proven by a process capability of Cpk > 1.33 and must be documented by a continuous monitoring of the production process. Parameters relevant for this process capability will be marked separately in the product's construction documents.

2.2.2.3 Reliability

The probability of failure and the return of devices for repair must be less than 1% per year. The failure rates have to be predicted using MTBF calculations.

A minimum calculated of 50k MTBF under nominal load and 25°C ambient temperature.



| MODEL NUMBER | HDP-QB05010U | PAGE | 8 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

3 Electrical Characteristics

3.1 Input

3.1.1 Input Voltage Nominal: 120/220 VAC 3.1.2 Input Voltage Range: 90 ~ 264 VAC

3.1.3 Input Frequency Range: 50 / 60Hz (47 ~ 63 Hz) 3.1.4 Inrush Current: 30A at 240AC input < 200us

3.1.5 Maximum Input Current: 0.15A measured at 5 Watts Vin = 100VAC & 1A load

3.1.6 Efficiency: CEC-VI 3.1.7 Turn-on Time: < 60ms

3.1.8 Input Fuse: 4.7R 0.5W Fuse resistor

3.1.9 AC Input Receptacle Type: Folding US AC blades 3.1.10 Isolation Voltage: Meet IEC 60950, IEC62368

3.1.11 AC Leakage Current: .15mA measured 264V & 63Hz

3.1.12 Dielectric withstands Voltage: 3000VAC 60sec or 4242VDC 60 sec with no breakdown;

Earth leakage at 110% of rated voltage should be < 10mA

3.1.13 Input Power (No Load): < 0.1W

3.2 Output

3.2.1 DC Output: 5.00 VDC3.2.2 Output Current: 1A

3.2.3 Load Regulation: 4.75 – 5.25 VDC

3.2.4 Ripple and Noise: 120mVp-p 3.2.5 Turn-on Overshoot: < 10%

3.2.6 Over-current Protection: 1.5Amax

3.2.7 Short Circuit Protection: Protected for continuous short circuit

3.2.8 Reset After Shutdown: Yes3.2.9 Thermal Stability Time: 30 min

3.2.10 Peak Load Duration: Indefinite (OCP will prevent overload)



| MODEL NUMBER | HDP-QB05010U | PAGE | 9 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

3.3 Cable & Connector

OD 3.5 X ID 1.35 X H 12 mm 90 degree ,Inside positive



4 Pin Male "A" Connector on the cable



4 Pin Female "A" Connector on the computer



4 Pin "B" Male Connector on cable



4 Pin "B" Female Connector on computer

| Pin | Name | Description | Color |
|-----|------|-------------|-------|
| 1 | vcc | +5 VDC | Red |
| 2 | D- | Data - | White |
| 3 | D+ | Data + | Green |
| 4 | GND | Ground | Black |

| 5V / 1A MFI configuration | | | |
|------------------------------|-----------|-----------|--|
| ID Pin | D- | D+ | |
| Spec (V) | 2.68 | 2 | |
| Tolerance (V) | 2.44-2.89 | 1.84-2.16 | |
| | | | |
| Non MFI Bridged version | | | |
| ID PIN D+/D- shorted | | | |



| MODEL NUMBER | HDP-QB05010U | PAGE | 10 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

4 Cosmetic

4.1 Surface Definitions

Level A is the primary surface. For example, the front face of the adapter.

Level B is a secondary surface that may be viewed periodically by the end user, but is not in direct view during normal use. For example, the Cable (AC and DC), the sides of the housing, and the back of the housing.

Level C surfaces are not visible by the end user. For example, the inaccessible inside surfaces of the product.

4.2 Inspection Conditions

4.2.1 Inspection Method: Light source: Cool white fluorescent lamp 750 – 1000Lux

4.2.2 Viewing Distance: 30cm

4.2.3 Viewing Angle: 0 - 90 Degrees

4.2.4 Part Rotation Angle During Inspection:

Vertical Rotation Angle 180 Degrees Horizontal Rotation Angle 360 Degrees

4.2.5 Viewing Time:

5 seconds total for all surfaces



| MODEL NUMBER | HDP-QB05010U | PAGE | 11 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

4.3 Cosmetic Defect Definitions

| Defect | Level A | Level B | Level C |
|--|--|---|--|
| Scratches, Dents, and Burrs (see Note 1) | Single defect not exceeding total surface area 5.50 mm ² | Two defects not exceeding total surface area 11 mm ² | Accept if it does not affect fit or function |
| Hairline Scratches, Gate Blush/Trim, Stress | Use 25% Contrast Standard to accept or reject for visible hairline scratches with depth of < 0.1 mm (total surface area not to exceed limits set in surface scratch below) | | |
| Surface Scratches, Scuffs (see Note 1) | Single defect not exceeding total surface area of 5.7 mm ² | Two defects not exceeding total surface area 25 mm ² | Accept if it does not affect fit or function |
| Chips, Nicks, Cracks or Broken Features | Not Allowed | | |
| Flash, Burrs, Sink Marks (see Note 2) | Not Allowed | Less than 0.5mm | Accept if it does not affect fit or function |
| Discoloration | Follow color samples | | |
| Parting Lines | See diagram | | |
| General Stains (not permanent) | Not allowed | | |
| Rust | Not allowed | | |
| Printing | No missing text or mistakes allowed. All letters should be visible. Refer to approved sample. | | |

Note 1:

Area called out in these fields are calculated based on limit samples. The values are calculated based on average area covered by the features.

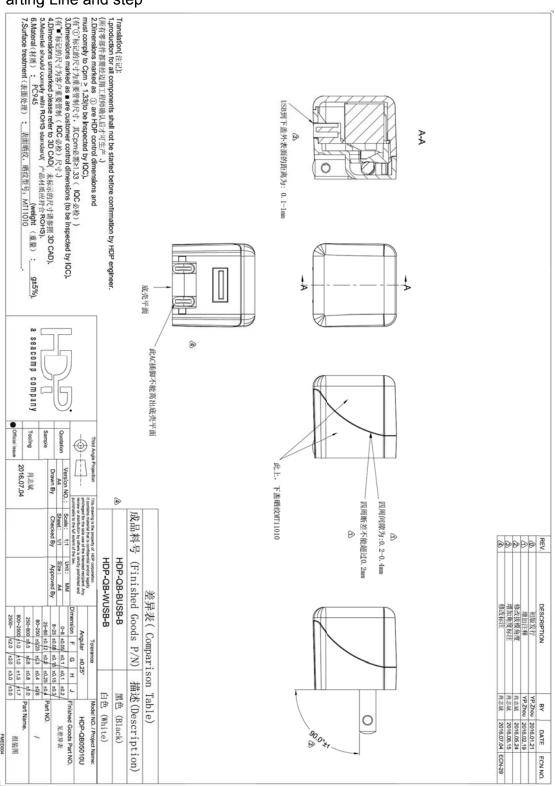
Note 2:

DC over-mold flash marks have to be signed off on samples and provided as acceptable limits.



| MODEL NUMBER | HDP-QB05010U | PAGE | 12 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

Parting Line and step

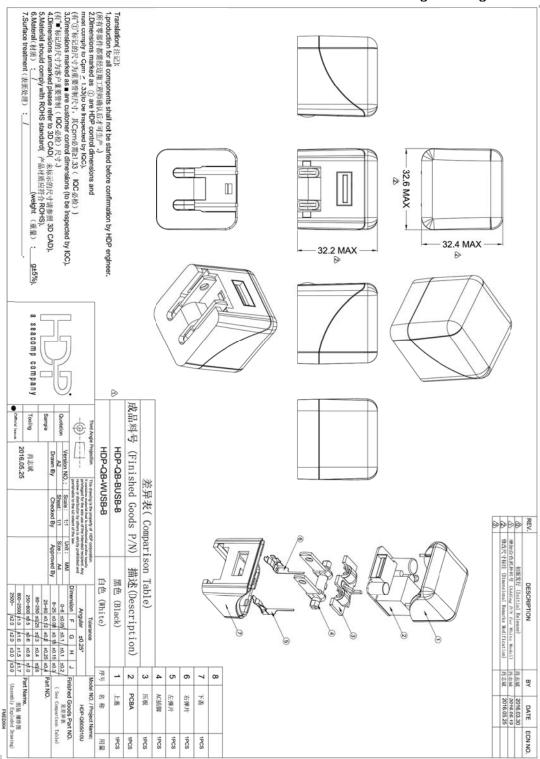




| MODEL NUMBER | HDP-QB05010U | PAGE | 13 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

4.4 Size / Weight:

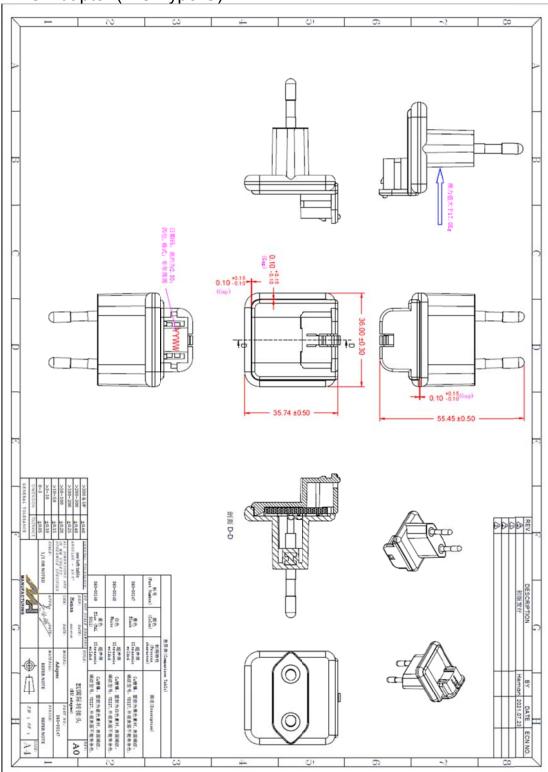
Product size should be 32W X 32L X 32H mm. Product weight is 30gm.





| MODEL NUMBER | HDP-QB05010U | PAGE | 14 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

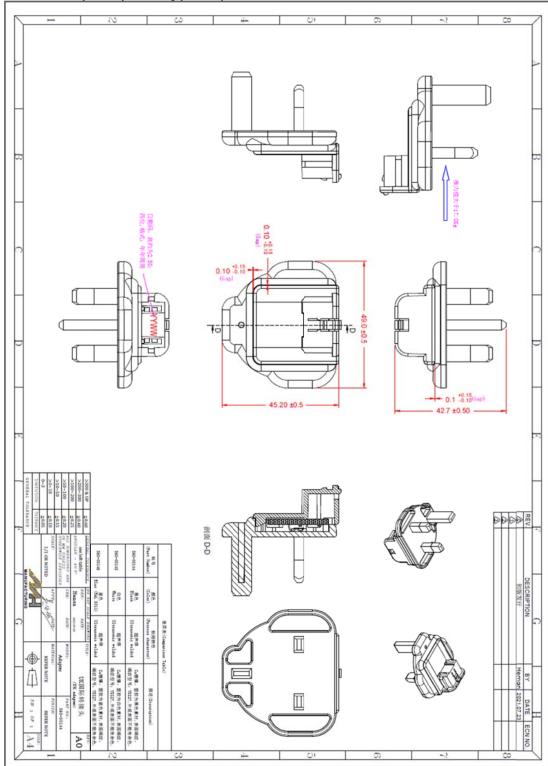
4.5 EU Adapter (IEC Type-C)





| MODEL NUMBER | HDP-QB05010U | PAGE | 15 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

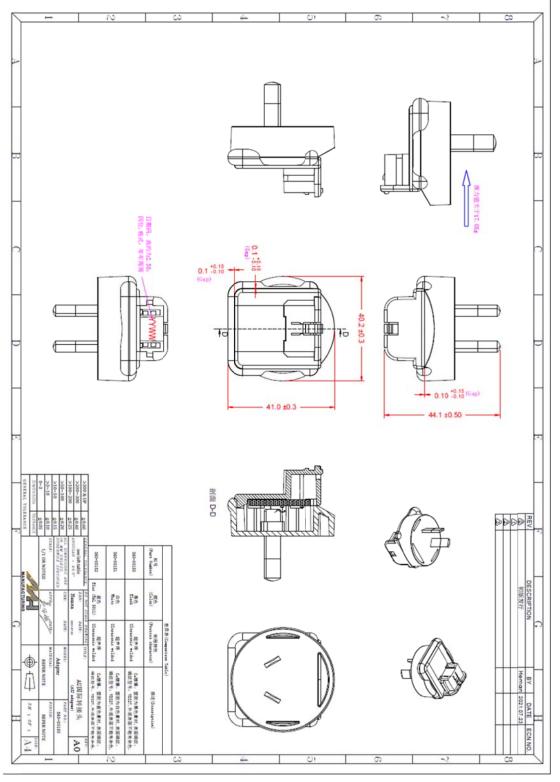
4.6 UK Adapter (IEC Type-G)





| MODEL NUMBER | HDP-QB05010U | PAGE | 16 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

4.7 AU Adapter (IEC Type-I)





| MODEL NUMBER | R HDP-QB05010U PAGE | | 17 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

Electromagnetic Compatibility 5

The following tests are required:

| Power Conversion Device | EU Reference | Title of Standard | International Reference | Test Level for Heavy Industrial | Test Level for Light Industrial | Test Level for 48 VDC p/s |
|-------------------------------------|---|---|---|--|--|--|
| AC-DC, DC- DC, Power Supplies | EN55032:2015 | Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement | CISPR22:1997 | Class "B" 4dB of margin Class "A" or Class "B" for servers | Class "B" 4dB of margin Class "A" or Class "B" for servers | Class "B" 4dB of margin Class "A" or Class "B" for servers |
| DC-DC, DC- DC Power Supplies | EN55024:1998 (EN50082-2:1995 updated to EN61000-6- 2:2001 for -48 VDC supply) | Information technology equipment – Immunity Characteristics – Limits and methods of measurement | CISPR24:1997 | | | Different tests and limits for DC power supplies |
| AC-DC, AC- DC Power Supplies | EN61000-3-2:2000 (PFC Power Supplies ONLY if rated greater than 75W) | Electromagnetic Compatibility (EMC) – Part 3: Limits – Section 2: Limits for harmonic current emissions (Equipment input current up to and including 16 A per phase) | IEC 61000-3- 2:2000 | Must meet Class D requirements | Must meet Class D requirements | N/A |
| AC-DC, AC- DC Power Supplies | EN61000-3-3:1995 (PFC Power Supplies ONLY) | Electromagnetic Compatibility (EMC) – Part 3: Limits – Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to and including 16A | IEC 61000-3- 3:1994 | Meet specification | Meet specification | N/A |
| AC-DC, DC- DC, Power Supplies | EN61000-4-2 | Electromagnetic Compatibility (EMC) – Part 4: – Section 2: Electrostatic discharge immunity test | IEC 1000-4-2 | (+/-) 2, 4, 8, 12 and 15 kV air (+/-) 2, 4, 6, 8 kV contact discharge | (+/-) 2, 4, 8, 12 and 15 kV air (+/-) 2, 4, 6, 8 kV contact discharge | (+/-) 2, 4, 8, 12 and 15 kV air (+/-) 2, 4, 6, 8 kV contact discharge |
| AC-DC, DC- DC, Power Supplies | EN 61000-4-3 + Israeli Deviations in SI 961 part 6.2 | Electromagnetic Compatibility (EMC) – Part 4: – Section 3: Radiated, radio-frequency electromagnetic field, immunity test | IEC 1000-4-3 Basic Standard ENV 50140 | 10V/m 80-1000MHz, 80% AM 900 +/- 5MHz 50%, 200Hz | 3V/m 80-1000MHz, 80% AM 900 +/- 5MHz 50%, 200Hz | 10V/m 80-1000MHz, 80% AM 900 +/- 5MHz 50%, 200Hz |
| AC-DC, DC- DC, Power Supplies | EN 61000-4-4 | Electromagnetic Compatibility (EMC) – Part 4: – Section 4: Electrical fast transient/burst immunity test | IEC 1000-4-4 | 1, 2, 4kV – Power 0.5, 1, and 2kV – Signal | 1, 2 kV – Power 0.5, 1 kV – Signal | 1, 2 kV – Power 0.5, 1, and 2kV – Signal |
| AC-DC, DC- DC, Power Supplies | EN 61000-4-5 | Electromagnetic Compatibility (EMC) – Part 4: – Section 5: Surge Immunity Test | IEC 1000-4-5 | 1, 2kV differential 2, 4kV common | 0.5, 1 kV diff. 0.5, 1, 2, 2.5 common | 0.5, 1kV differential 0.5 1kV common |
| AC-DC, DC- DC, Power Supplies | EN 61000-4-6 + Israeli Deviations in SI 961 part 6.2 | Electromagnetic Compatibility (EMC) – Part 4: – Section 6: Conducted disturbances induced by radio- frequency fields – immunity test | IEC 1000-4-6 Basic Standard ENV 50141 | 10V/m 80% AM (1kHz) | 3 V/m 80% AM (1kHz) | 10 V/m 80% AM (1kHz) |
| AC-DC, DC- DC, Power Supplies | EN 61000-4-8 | Electromagnetic Compatibility (EMC) – Part 4: – Section 8: Power-frequency magnetic field immunity test | IEC 1000-4-8 | 30 A/m (r.m.s.) | 1 A/m (r.m.s.) | 30 A/m (r.m.s.) |
| AC-DC, DC- DC, Power Supplies | EN 61000-4-11 | Electromagnetic Compatibility (EMC) – Part 4: – Section 11: Voltage dips, short interruptions and voltage variations immunity test | IEC 1000-4-11 | 30% for 0.5 S >95% for 10mS >95% for 5 S | 30% for 0.5 S >95% for 10mS >95% for 5 S | 30% for 0.5 S >95% for 10mS >95% for 5 S |

Light Industrial: EN55022:1998 (Emission) and EN 61000-6-1:2001 (Immunity) Heavy Industrial: EN55011 (Emission) and EN 610006-2:2005 (Immunity)

The content of the test report, at a minimum, includes:

- Test object used (development status with serial number/sample name) Mode(s) of operation of the test object
- Test result
- Photograph/sketch of the test environment along with listed test conditions
- Applied measurement tools/equipment
- Ambient temperature for ESD-tests. Also include air pressure and air humidity
- Name of Test Engineer
- Date of the test



| MODEL NUMBER | R HDP-QB05010U PAGE 18 | | 18 of 22 |
|--------------|--|------|-------------|
| PART NUMBER | ER HDP-QB-0005 REVISION A3 | | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

6 Labeling

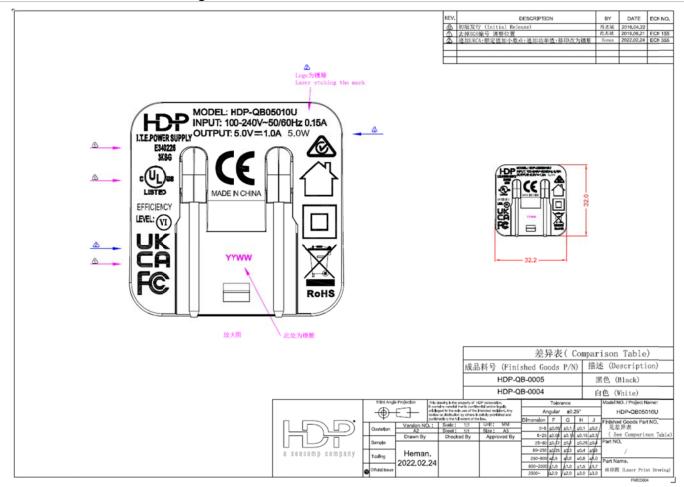
6.1 Labeling the Device

The labeling must comply with IEC 60950 & IEC 62368 requirements.

The following information as a minimum must be printed on the adapter:

Input rating
Output rating
Made in China
Model and/or part number
Production lot or date code

6.2 Label Drawing

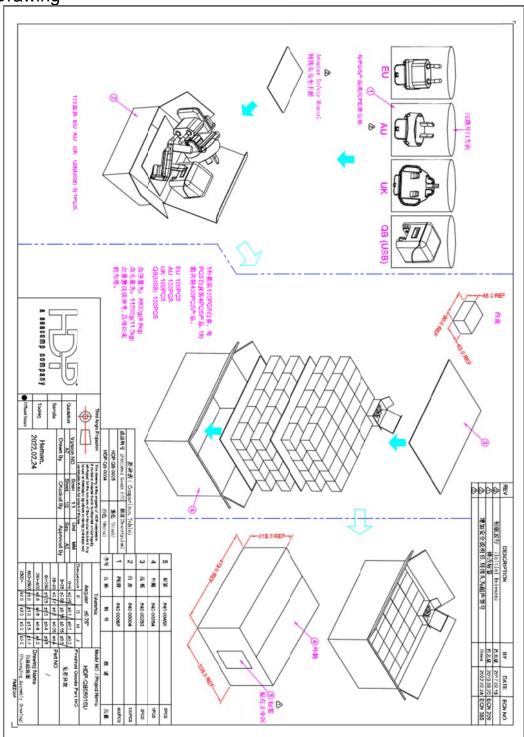




| MODEL NUMBER | R HDP-QB05010U PAGE 19 | | 19 of 22 |
|--------------|--|------|-------------|
| PART NUMBER | JMBER HDP-QB-0005 REVISION A3 | | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

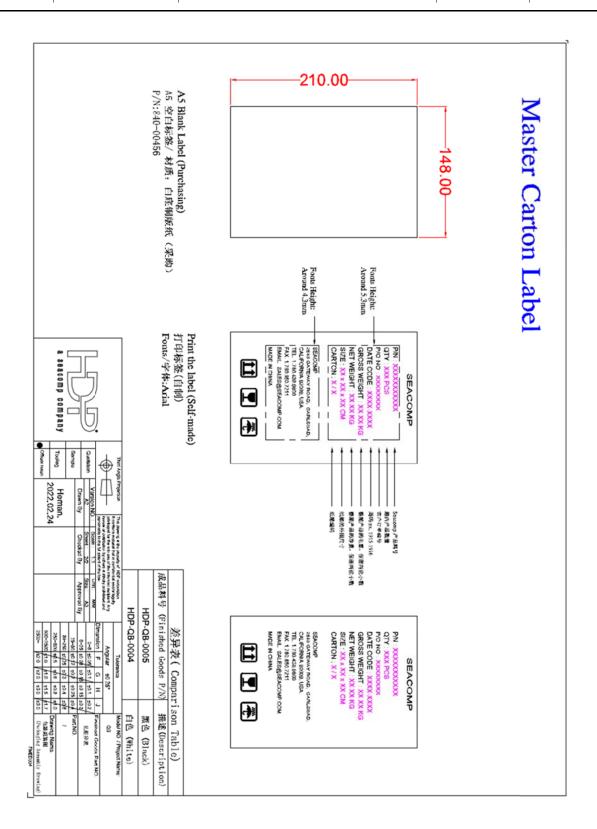
7 Packaging

7.1 Drawing





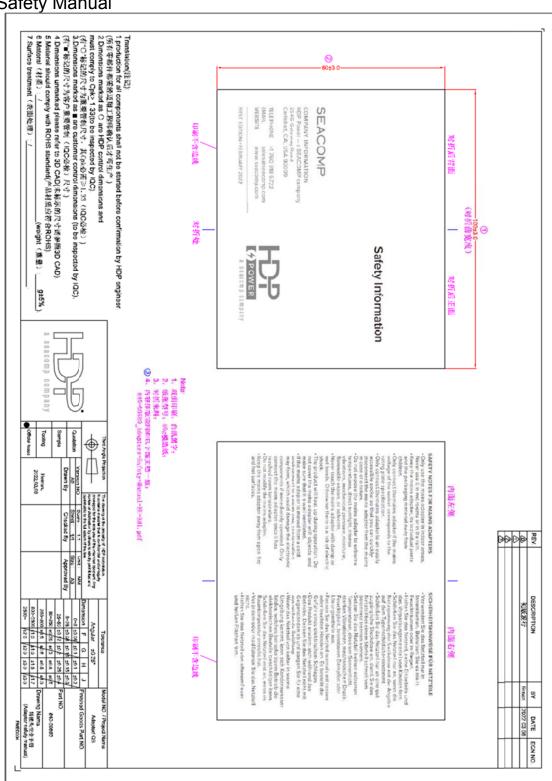
| MODEL NUMBER | R HDP-QB05010U PAGE | | 20 of 22 |
|--------------|--|----------|-------------|
| PART NUMBER | HDP-QB-0005 | REVISION | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |





| MODEL NUMBER | R HDP-QB05010U PAGE 2 | | 21 of 22 |
|--------------|--|------|-------------|
| PART NUMBER | JMBER HDP-QB-0005 REVISION A3 | | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

7.2 Safety Manual





| MODEL NUMBER | R HDP-QB05010U PAGE 22 | | 22 of 22 |
|--------------|--|------|-------------|
| PART NUMBER | BER HDP-QB-0005 REVISION A3 | | A3 |
| DESCRIPTION | QB 5V 1A Black USB with International Adapters | DATE | Mar15, 2022 |

7.3 Packaging Test

| 1 | Bulk product | Drop package on each side for a total of 10 drops (2 opposite corners, 3 adjacent sides of bottom corner, then all 6 faces) per system on concrete floor from a height of 1.0 meter. This is an operational test. |
|---|------------------------|---|
| | | Pass/Fail Criteria: |
| | | 1.The systems shall pass Functional Test. |
| | | 2. No visible damage to product and gift box. |
| | | Drop fully packaged products (in gift box or clamshell) onto a concrete floor |
| | | from height of 153cm for 10 drops on the six surfaces and four corners. |
| | Drop test for | |
| 2 | Packaged Product (gift | Pass/Fail Criteria:□ |
| | box, clamshell, etc.) | The systems shall pass Functional Test. |
| | | 2. Paper or PET deformation is acceptable. No damage in product integrity |
| | | of packaging materials (e.g. sealed edge openings) is allowed. |
| | | Test with sine wave that will sweep the frequency from 7 - 500 hertz for |
| | | construction test; 5 - 70 hertz for packaging test. Displacement >3.15mm. |
| | | Total test duration time shall be 30 min (10 min per axis). Test shall be |
| | Sinusoidal Vibration | performed in three mutually perpendicular axes: Z-axis (vertical), |
| 3 | Sinusoluai vibration | Y-axis (fore-aft), and X-axis (lateral). |
| | | |
| | | Pass/Fail Criteria:□ |
| | | The UUT and packaging shall withstand the above test procedure without |
| | | visible damage or performance decline during operation. |

8 Warranty

One year warranty for defects arising from workmanship and materials per the SEACOMP Warranty, RMA, and Failure Analysis Policy.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

HDP Power: