



# 10W Fixed Blade USB Charger - EU



## Features

- Fixed Blade
- Ecodesign/ErP Lot 7 (EU) 2019/1782 Compliance
- CoC Version 5 Tier 2 Compliance
- Low Cost
- OVP, OCP, short circuit protections

## Applications

- Tablets
- Portable GPS Devices
- Personal Electronics



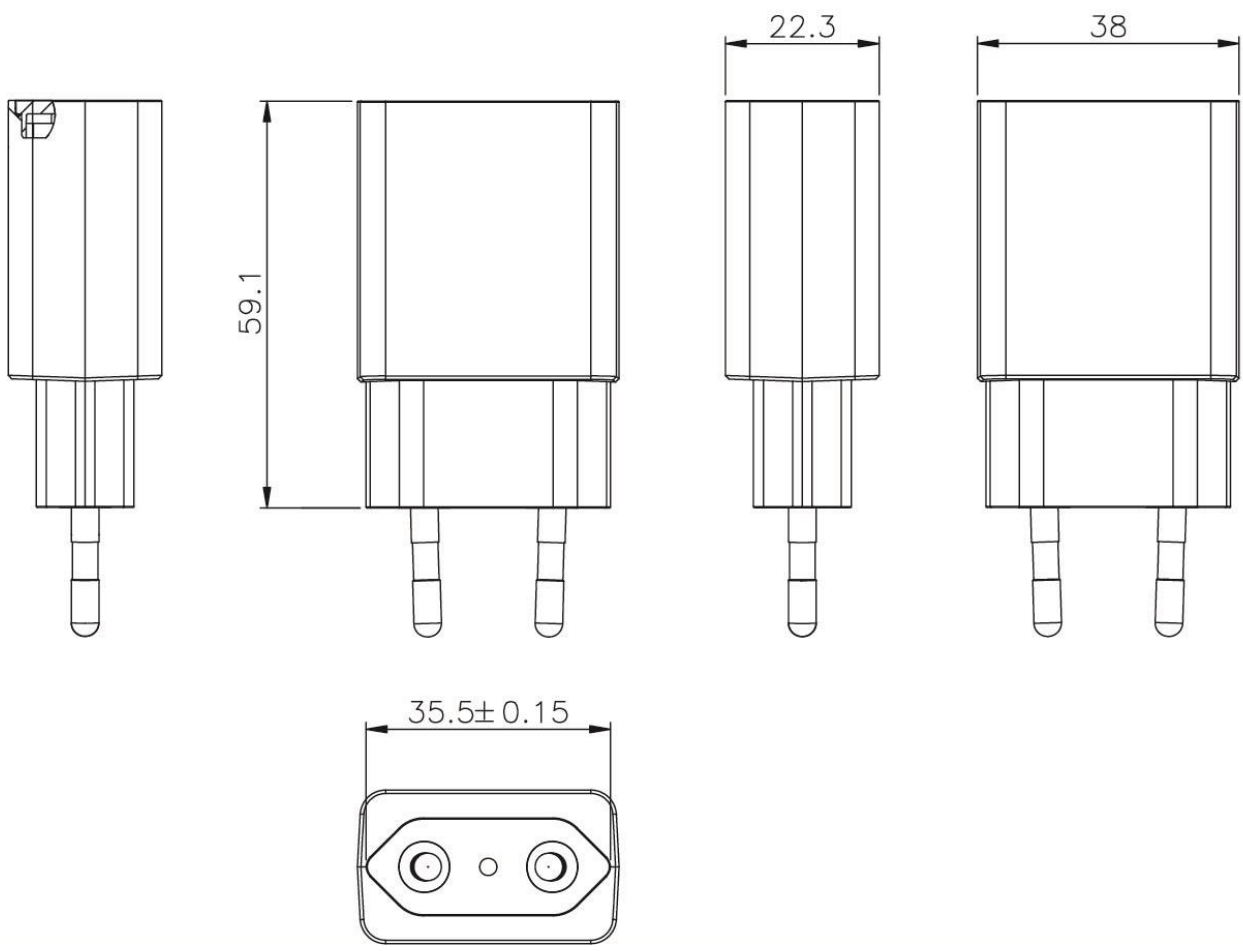
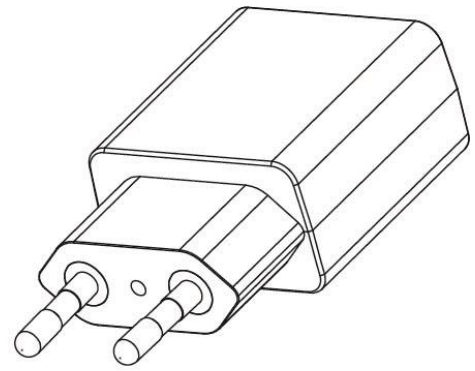
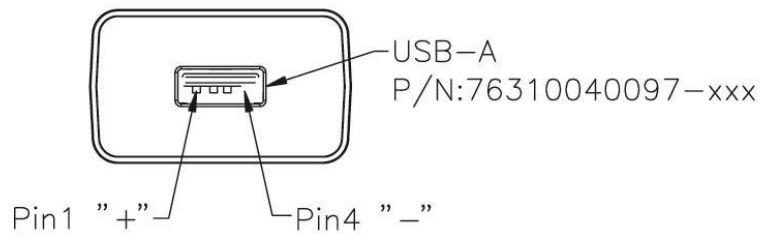


# AQ10E Specifications<sup>1</sup>

| Model                    |   | AQ10E-050B-H <sup>2</sup>  | AQ10E-050BP-H <sup>3</sup> | AQ10E-050BW-H <sup>2</sup> |
|--------------------------|---|--|----------------------------|----------------------------|
| Output                   | DC Output Voltage   | 5.0V   |                            |                            |
|                          | Max Current   | 2.0A   |                            |                            |
|                          | Output Power  | 10.0W  |                            |                            |
|                          | Output Voltage Tolerance  | 4.75V~5.40V (at USB A connector)   |                            |                            |
|                          | Ripple & Noise P-P(max) <sup>4</sup>  | 150mV  |                            |                            |
| Input                    | AC Input Voltage Range  | 90 to 264VAC   |                            |                            |
|                          | AC Input Frequency  | 47 to 63Hz   |                            |                            |
|                          | Input Current   | 0.28A (RMS) max at 115VAC/60Hz, 0.16A (RMS) max at 230VAC/50Hz   |                            |                            |
|                          | No Load Power Consumption at 115VAC Input   | 0.014W   | 0.037W                     | 0.014W                     |
|                          | No Load Power Consumption at 230VAC Input   | 0.021W   | 0.048W                     | 0.021W                     |
|                          | 115VAC Average Efficiency <sup>5</sup>  | 80.4%  | 79.74%                     | 80.4%                      |
|                          | 230VAC Average Efficiency <sup>5</sup>  | 80.4%  | 80.02%                     | 80.4%                      |
|                          | 230VAC 10% Load Efficiency <sup>5</sup>   | 76.2%  | 75.13%                     | 76.2%                      |
|                          | Leakage Current   | 125uA max @264VAC/50Hz   |                            |                            |
| Protection               | Over-Voltage  | 8.0V max   |                            |                            |
|                          | Short Circuit   | The output can be shorted without damage   |                            |                            |
|                          | Over-Current  | 3.0A max   |                            |                            |
| Environmental            | Operating Temperature   | 0°C to +40°C   |                            |                            |
|                          | Non-Operating Temperature   | -20° to +70°C  |                            |                            |
|                          | Operating Humidity  | 90% RH max   |                            |                            |
| Safety Approvals and EMC | Dielectric Withstand (HI-POT)   | Primary to Secondary: 3000VAC for 1min, 10mA   |                            |                            |
|                          | Insulation Resistance   | Primary to Secondary: >10M ohm for 500VDC  |                            |                            |
|                          | Standards   | IEC 62368-1  |                            |                            |
|                          | EMI Emissions   | EN 55032/CISPR 32 Class B Conducted and Radiated   |                            |                            |
|                          | Harmonic Current Emissions  | IEC 61000-3-2  |                            |                            |
|                          | Voltage Fluctuations & Flicker  | IEC 61000-3-3  |                            |                            |
|                          | Immunity  | EN 55035/CISPR 35: IEC 61000-4-2 (Contact: ±8KV, Air: ±15KV), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (±1kV), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |                            |                            |
| Mechanical               | Dimensions (L x W x H)  | 77.8mm (3.06in) x 38.0mm (1.49in) x 22.3mm (0.88in)  |                            |                            |
|                          | Weight  | 40g  |                            |                            |
|                          | DC Output Connector   | USB-A  |                            |                            |
|                          | Case Color  | Black  | Black                      | White                      |
| Notes                    | <ol style="list-style-type: none"> <li>The specifications defined are at ambient temperature of 25C, unless otherwise specified.</li> <li>Special order item. Minimum order quantity applies.</li> <li>Supports 5 charging methods: <ol style="list-style-type: none"> <li>Divider 1 (DCP Applying 2V on D+ Line and 2.7V on D- Line)</li> <li>Divider 2 (DCP Applying 2.7V on D+ Line and 2V on D- Line)</li> <li>USB Battery Charging Specification Revision 1.2 (BC1.2)</li> <li>Chinese Telecommunications Industry Standard YD/T 1591-2009</li> <li>1.2V on both D+ and D- lines</li> </ol> </li> <li>20MHz bandwidth frequency oscilloscope, add a 0.1µF multilayer Cap. and Low ESR Electrolytic Cap. (10µF) at output connector terminals (nominal line voltage, full load).</li> <li>Efficiency is measured after 30 minutes burn-in.</li> </ol> |  |                            |                            |



# AQ10E Outline Drawing





# USB Cables – Sold Separately

## Unit: mm

|                        |   |
|------------------------|---|
| Part no: IP-USB1(C10)S | Desc: USB-A to Micro-B – 1 Meter – Black                      |
|                        |   |
| Part no: IPUSB1CS      | Desc: USB to Mini-B – 1.5 Meter – Black                       |
|                        |   |
| Part no: IPUSB1MS      | Desc: USB-A to Micro-B – 1.5 Meter – Black                    |
|                        |   |
| Part no: IPUSB1M5LD    | Desc: USB-A to Micro-B – 24AWG – Low Drop – 1.5 Meter – Black |
|                        |   |
| Part no: IPUSB1P5      | Desc: USB-A to Micro-B – 1 Meter – 24AWG – Black              |
|                        |   |
| Part no: IPUSB1P5W     | Desc: USB-A to Micro-B – 1 Meter – 24AWG – White              |
|                        |   |

|                       |  |
|-----------------------|--|
| Part no: IPUSB1MSW    | Desc: USB-A to Micro-B – 1.5 Meter – White   |
|                       |  |
| Part no: UES-1001A160 | Desc: Low Drop Type-C USB Cable – 1 Meter – 23AWG on Power – 30AWG on Data - Black |
|                       |  |
| Part no: UES-1003A160 | Desc: Low Drop Type-C USB Cable - 1 Meter – 23AWG on Power – 30AWG on Data - White |
|                       |  |