



IB20Q – IB24Q Series

20 - 24 Watt Interchangeable AC-DC Wall Plug-In
UL/EN/IEC 62368-1 2nd Ed., DoE VI, CoC v5 Tier 2

Date: 9/12/18

Rev: 091218

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The IB20Q – IB24Q Series switch mode power supply offers 20 Watts to 24 Watts output power, with an output voltage range of 5 Vdc - 48 Vdc. Wall Plug-In case style with interchangeable input plugs, enabling the unit to be used worldwide, with UL/EN/IEC 62368-1 2nd Edition and 60950-1 2nd Edition safety approvals, DoE Level 6 and CoC v5 Tier 2.



Input Voltage	90 to 264 Vac
Input Frequency	47 to 63 Hz
Input Current	0.58 A Max.
Leakage Current	0.25 mA Max.
Output Voltage & Current	See Table on Page 2
Ripple & Noise (P-P) ¹	2% Max.
Over-Voltage Protection	Unit is protected from over-voltage conditions
Over-Current Protection	Unit is protected from over-current conditions
Transient Response Time	With 50% Load Change: 0.5 ms
Efficiency	Meets DoE Level VI and CoC v5 Tier 2 Criteria
No Load Power Consumption	Meets DoE Level VI and CoC v5 Tier 2 Criteria
Load Regulation	± 5% Max.
Hold-Up Time	10 ms Min.
Withstanding Voltage	Primary to Secondary: 3000 Vac
Mean Time Between Failure	Full Load at 25°C Ambient: 300,000 Hours Min. (Telcordia)
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 80°C
Weight	158 g, Typical
Industry Compliance	RoHS 2, DoE VI, CoC v5 Tier 2
EMI Requirements	Meets Conduction and Radiation Limits of: FCC Part 15 Class B, CISPR-32 Class B, and EN 55032 Class B
Safety Compliance	UL/cUL (UL/CSA 62368-1 2 nd Ed., 60950-1:2 nd Ed.), CE (EN 60950-1:2 nd Ed.), TUV/GS, CB (EN/IEC 62368-1:2 nd Ed.), RCM, PSE, CCC, BSMI, LPS

Features:

- Universal Input 100 - 240 Vac
- Available with U.S., European, British, Australian, and China Input Plugs
- Over-Voltage Protection
- Over-Current Protection
- Short Circuit Protection
- 100% Burn-In
- RoHS 2 Compliant
- Efficiency: DoE VI, CoC v5 Tier 2

Note:

1. Ripple & Noise are measured with a 0.1 µF multilayer capacitor & 47 µF low ESR electrolytic capacitor in parallel and a 20 MHz bandwidth-limited scope.



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Output Voltage and Current Table

Model Number	Output Voltage	Output Current	Output Power
IB20Q_05R	5.0 Vdc	4.0 A	20.00 W
IB21Q_06R	5.9 Vdc	3.5 A	20.65 W
IB24Q_06R	5.9 Vdc	4.0 A	23.60 W
IB21Q_07R	7.0 Vdc	3.0 A	21.00 W
IB23Q_07R	7.5 Vdc	3.0 A	22.50 W
IB23Q_09R	9.0 Vdc	2.5 A	22.50 W
IB24Q_12R	12.0 Vdc	2.0 A	24.00 W
IB24Q_15R	15.0 Vdc	1.6 A	24.00 W
IB24Q_24R	24.0 Vdc	1.0 A	24.00 W
IB24Q_48R	48.0 Vdc	0.5 A	24.00 W

IB □ □ Q □ □ □ R

→ Output Voltage: See Table (Output Voltage)

→ Input Plug:

U = U.S. Plug (US)

E = European Plug (EU)

B = British Plug (UK)

A = Australian Plug (AU)

C = China Plug

K = Kit with US, UK, EU,
and AU plug.

→ Output Power: See Table (Model Number)



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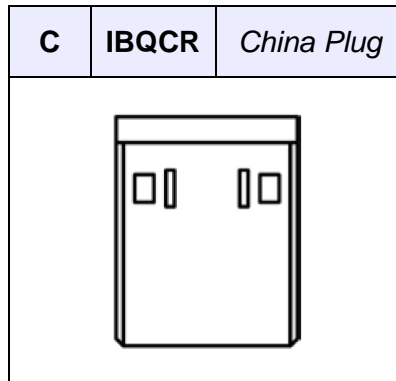
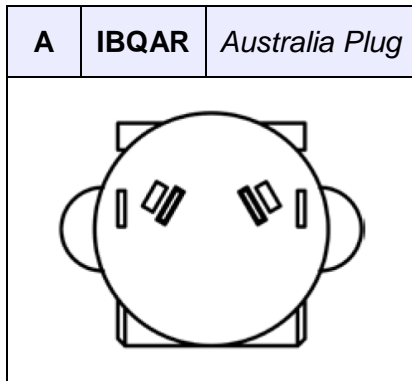
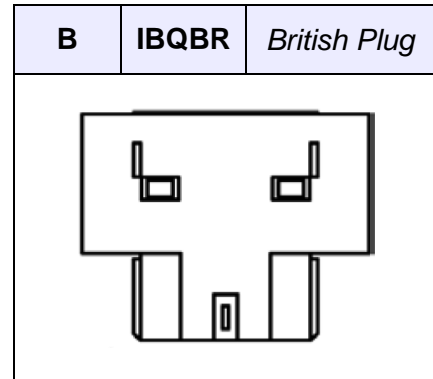
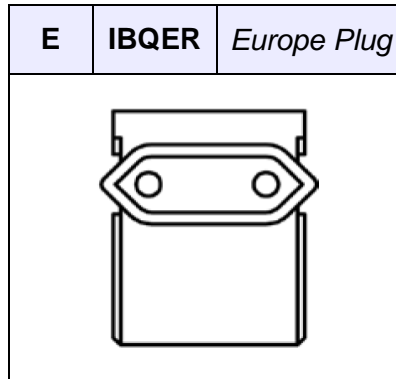
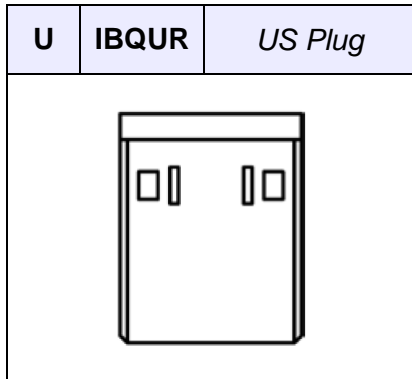
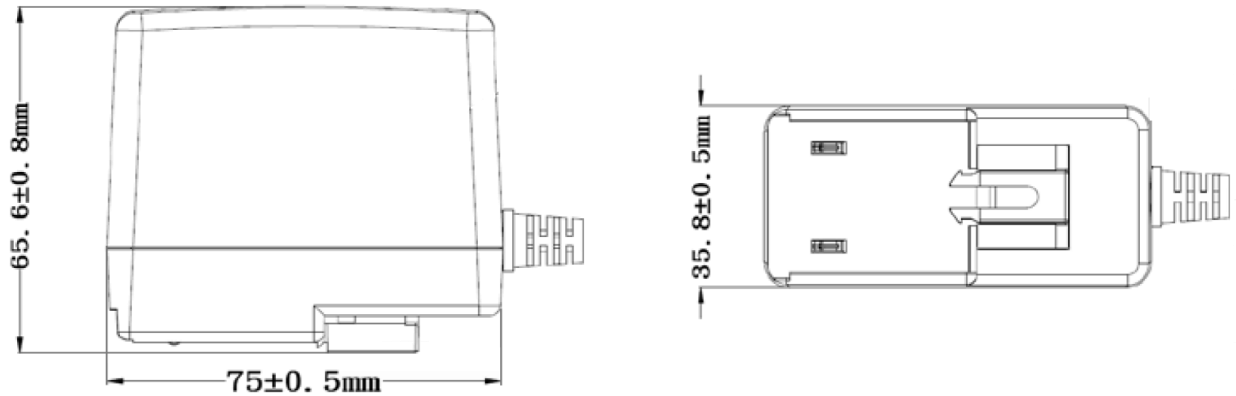
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Mechanical Specification (mm)



Note: Output connector to be specified by customer.
 APX will be happy to recommend the appropriate connector for your application needs.
 The cable length and wire gauge will be dependent on the Energy Efficiency level requirements.