

DATA SHEET NBS50A

AC adapter 50W



SUMMARY

Latest generation switch mode power supply (SMPS) designed by NetBit for the latest CPE product applications for high volume deployment in North America and Europe.

USER BENEFITS

- Compact size – designed to maximise shipping efficiency and reduce total transportation costs
- High efficiency – optimized to meet latest energy efficiency standards for lower total power consumption
- CPE ready – built to meet and exceed the operating requirements for all CPE applications and installations
- Reliable – engineered to high standards to give a long and reliable service for operators and end users

APPLICATIONS

- Advanced STBs, DVRs/PVRs, home media servers
- Advanced data gateways: DSL, DOCSIS 3.0/3.1, 10G-PON
- Smart/connected AV devices, smart audio speakers/sound bars

AC INPUT

Rated input voltage: 100-120 / 100-240 / 200-240VAC
Operating range: 90-135 / 90-264 / 195-264VAC
Wall mount AC plug options: US, EU
Desktop: C8, C6
Inrush current: <100A
No load power consumption: $\leq 0.075W$

DC OUTPUT

Output voltage current: 0.05-4.2A, 50W max
Output voltage: 12V
Load/line regulation: +/- 5%
OVP: custom
OCP: 120-150%
Hold-up time: $\geq 10ms$
Turn on delay: <3s
Overshoot / undershoot: $\leq 10\%$
Audible noise: <18dBA at 600mm
Ripple: 120mVp-p

OPERATIONAL

Operating temperature range: 0-45°C
Altitude: 0 – 5,000m operational, 0 – 12,000m non-op
Humidity: 0 – 95% operational and non-op

MECHANICALS

Color: black / white
DC plug size: custom
DC cable length: custom
LED: optional

RELIABILITY

MTBF: >438,000 hours per Telcordia SR332
E-Cap lifetime: >10 years @ 25°C
Derating standard: IPC-9592B Class I

REGULATORY COMPLIANCE

EMI: CE + RE: EN 55032 / FCC Part 15 Class B
ESD: EN 61000-4-2 15kV air / 8kV contact
Surge immunity: ITUK.21 6kV enhanced surge IEC61000-4-5

SHIPPING & PACKAGING

Approx. weight: 206g
Carton quantity: 60pcs
Pallet quantity: 1,800pcs
Full container load 20'GP: 36,000pcs

CERTIFICATIONS

Safety: IEC/EN 62368-1, CE, CB, UL, RCM
Efficiency: DoE VI / ErP VI / CoC v5 T2
Environmental: RoHS/REACH/PRO65 compliant

CASE DIMENSIONS

Desktop
Width: 55mm
Height: 33.5mm
Length: 118mm



Wall mount - vertical plug
Width: 37mm
Height: 52mm
Length: 100mm



OPTIONAL CPE ENHANCEMENTS

This PSU design can be customized to meet the exact needs of your application or design including and not limited to:

- Customized output voltage
- PLT/PLC compatibility
- PLT conducted emissions
- UL1449 open neutral protection
- Customized transient peak power
- Quiet Line Noise (QLN)

Please contact our sales team to discuss your exact needs.

For more information on NetBit products, please visit our website - www.netbit.com