

# DATA SHEET NBS12F

AC adapter 12W



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## 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

- IPTV set-top boxes
- HD/4K IP client set-top boxes

## 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, UK, Brazil, Australia, Argentina  
Inrush current: <100A  
No load power consumption:  $\leq 0.075W$

## DC OUTPUT

Output voltage current: 0.05-2.1A, 12W max  
Output voltage: 4.7-7.5V or 8-12V  
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: 72g  
Carton quantity: 120pcs  
Pallet quantity: 2,880pcs  
Full container load 20'GP: 57,600pcs

## 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

Wall mount - vertical plug  
Width: 28mm  
Height: 37.3mm  
Length: 66.4mm



## 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](http://www.netbit.com)