



Product Service

# CERTIFICATE

No. B 06 08 52876 066

**Holder of Certificate:** Sea Sonic Electronics Co.,Ltd.

8F, No.19, Alley 360, Sec.1  
114 Neihu Rd., Neihu, Taipei  
TAIWAN

**Certification Mark:**



**Product:**

**Power supplies**

The product was tested on a voluntary basis and complies with the following essential requirements. The certification mark shown above can be affixed on the product. The certification mark must not be altered in any way. See also notes overleaf.

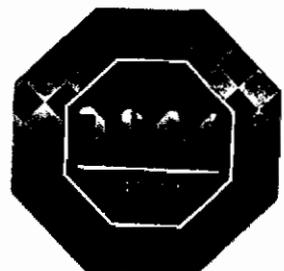
**Test report no.:**

612106130101

**Date,** 2006-08-22

Page 1 of 3

*Bill Li*





**CERTIFICATE**

No. B 06 08 52876 066

**Model(s):** SS-xES Active PFC z3, SS-xET Active PFC z3,  
 SS-yGB Active PFC z3  
 ( "x" can be 300, 350, 400 or 500 and "y" can be 330,  
 380, 430 or 500 to denote the different output rating;  
 "z" can be F (100-240 Vac) or "T" (200-240 Vac) to denote  
 different input voltage )

**Parameters:**

Rated input voltage:	100-240 Vac or 200-240 Vac
Rated input current:	See attachment
Rated frequency:	50/60 Hz
Rated outputs:	See attachment
Protection class:	I
Max. ambient temperature:	50°C
Degree of protection against ingress of liquids:	Ordinary

Remark: When installing, all requirements of below  
 mentioned test standards must be fulfilled.

**Tested according to:** EN 60950-1/A11:2004

**Production Facility(ies):** 52877



Taiwan

Attachment to the Certificate

No. B 06 08 52876 066

The input and output rating of the models are as below:

Model-#	AC Input Rating	DC Output Rating								Max. Power (W)
		+3.3V (A)	+5V (A)	+12V1 (A)	+12V2 (A)	-12V (A)/(W)	+5Vsb (A)/(W)	+5V & +3.3V max. (W)	+12V1 & +12V2 max.(W)	
SS-300ES Active PFC F3 SS-300ET Active PFC F3	100-240V, 50/60Hz, 5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-330GB Active PFC F3	100-240V, 50/60Hz, 5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	330
SS-350ES Active PFC F3 SS-350ET Active PFC F3	100-240V, 50/60Hz, 6A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-380GB Active PFC F3	100-240V, 50/60Hz, 6A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	380
SS-400ES Active PFC F3 SS-400ET Active PFC F3	100-240V, 50/60Hz, 7A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-430GB Active PFC F3	100-240V, 50/60Hz, 7A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	430
SS-500ES Active PFC F3 SS-500ET Active PFC F3 SS-500GB Active PFC F3	100-240V, 50/60Hz, 9A	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500
SS-300ES Active PFC T3 SS-300ET Active PFC T3	200-240V, 50/60Hz, 2.5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-330GB Active PFC T3	200-240V, 50/60Hz, 2.5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	330
SS-350ES Active PFC T3 SS-350ET Active PFC T3	200-240V, 50/60Hz, 3A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-380GB Active PFC T3	200-240V, 50/60Hz, 3A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	380
SS-400ES Active PFC T3 SS-400ET Active PFC T3	200-240V, 50/60Hz, 3.5A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-430GB Active PFC T3	200-240V, 50/60Hz, 3.5A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	430
SS-500ES Active PFC T3 SS-500ET Active PFC T3 SS-500GB Active PFC T3	200-240V, 50/60Hz, 4.5A	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500

Date: 2006-08-22



Testing Laboratory

Bill Lin

Bill Lin

# Certificate



for European Product Safety

Reference No. 700981

## Building-in power supply for business machines

*Type designation* SS-\*ES Active PFC \*3, SS-\*ET Active PFC \*3 and SS-\*GB Active PFC \*3

*Certificate holder* **SEA SONIC ELECTRONICS CO., LTD.**  
8F., No. 19, Alley 360, Sec. 1,  
Neihu Road, 114 Neihu  
Taipei  
TAIWAN

*The product complies with the standard(s)* EN 60950-1:2001 and A11

*Date of expiry* 1 December 2010

*EU Directive information* *The product satisfies the provisions for CE marking according to the Low Voltage Directive 2006/95/EC.*

Terms in Intertek Semko's Agreement on certification. Additional information in Appendix.

*Certification Body* Intertek Semko AB, Product Certification *Place* Kista - Stockholm

*Signed*

  
\_\_\_\_\_  
Gunilla Lindström

*Date* 22 January 2007



## Appendix

Reference No. 700981

### Technical data

Type designation	SS-*ES Active PFC *3, SS-*ET Active PFC *3 and SS-*GB Active PFC *3
Input	See additional pages
Output	See additional pages
Class	I
Brand name:	Seasonic

Manufacturing site(s) DONG GUAN SEA SONIC ELECTRONICS CO., LTD.  
Zheng Keng Industrial Park  
Yu Wu District, 523117, Dongcheng,  
Dongguan City, GD  
P.R. CHINA

This test report is based on CB report No. 081-60823-000 with CB certificate No. DE 3 - 54933, issued by TÜV SÜD Product Service GmbH.

The details of the model designation of SS-\*ES Active PFC \*3 are shown as follows:  
The 1st "\*" may be "300", "350", "400" or "500" to denote the different output rating.  
The 2nd "\*" may be "F" or "T" to denote the different input rating.

The details of the model designation of SS-\*ET Active PFC \*3 are shown as follows:  
The 1st "\*" may be "300", "350", "400" or "500" to denote the different output rating.  
The 2nd "\*" may be "F" or "T" to denote the different input rating.

The details of the model designation of SS-\*GB Active PFC \*3 are shown as follows:  
The 1st "\*" may be "330", "380", "430" or "500" to denote the different output rating.  
The 2nd "\*" may be "F" or "T" to denote the different input rating.

This certificate, which includes production control, is considered to constitute sufficient support for an EC Declaration of Conformity and CE marking of the products according to the Low Voltage Directive 2006/95/EC.

All models are identical except for model designation, input/output rating, enclosure shape and DC fan chassis size.

- a) The model SS-\*ES Active PFC \*3 is installed with 8 cm DC fan.
- b) The models SS-\*ET Active PFC \*3 and SS-\*GB Active \*3 are installed with 12 cm DC fan.



# Appendix

Reference No. 700981

The input and output rating of SS-\*ES Active PFC \*3 are shown as follows:

Model	AC input ratings	DC output ratings								
		+3.3 V (A)	+5 V (A)	+12 V1 (A)	+12 V2 (A)	-12 V (A)/(W)	+5 Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. Power (W)
SS-300ES Active PFC F3	100-240 V, 50/60 Hz, 5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ES Active PFC F3	100-240 V, 50/60 Hz, 6 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ES Active PFC F3	100-240 V, 50/60 Hz, 7 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ES Active PFC F3	100-240 V, 50/60 Hz, 9 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500
SS-300ES Active PFC T3	200-240 V, 50/60 Hz, 2.5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ES Active PFC T3	200-240 V, 50/60 Hz, 3 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ES Active PFC T3	200-240 V, 50/60 Hz, 3.5 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ES Active PFC T3	200-240 V, 50/60 Hz, 4.5 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500



# Appendix

Reference No. 700981

The output rating of SS-\*ET Active PFC \*3 are shown as follows:

Model	AC input ratings	DC output ratings								
		+3.3 V (A)	+5 V (A)	+12 V1 (A)	+12 V2 (A)	-12 V (A)/(W)	+5 Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. Power (W)
SS-300ET Active PFC F3	100-240 V, 50/60 Hz, 5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ET Active PFC F3	100-240 V, 50/60 Hz, 6 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ET Active PFC F3	100-240 V, 50/60 Hz, 7 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ET Active PFC F3	100-240 V, 50/60 Hz, 9 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500
SS-300ET Active PFC T3	200-240 V, 50/60 Hz, 2.5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ET Active PFC T3	200-240 V, 50/60 Hz, 3 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ET Active PFC T3	200-240 V, 50/60 Hz, 3.5 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ET Active PFC T3	200-240 V, 50/60 Hz, 4.5 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500



# Appendix

Reference No. 700981

The output rating of SS-\*GB Active PFC \*3 are shown as follows:

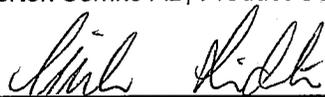
Model	AC input ratings	DC output ratings								
		+3.3 V (A)	+5 V (A)	+12 V1 (A)	+12 V2 (A)	-12 V (A)/(W)	+5 Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. Power (W)
SS-330GB Active PFC F3	100-240 V, 50/60 Hz, 5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	330
SS-380GB Active PFC F3	100-240 V, 50/60 Hz, 6 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	380
SS-430GB Active PFC F3	100-240 V, 50/60 Hz, 7 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	430
SS-500GB Active PFC F3	100-240 V, 50/60 Hz, 9 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500
SS-330GB Active PFC T3	200-240 V, 50/60 Hz, 2.5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	330
SS-380GB Active PFC T3	200-240 V, 50/60 Hz, 3 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	380
SS-430GB Active PFC T3	200-240 V, 50/60 Hz, 3.5 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	430
SS-500GB Active PFC T3	200-240 V, 50/60 Hz, 4.5 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500

Certification Body

Intertek Semko AB, Product Certification

Place Kista - Stockholm

Signed

  
 \_\_\_\_\_  
 Gunilla Lindström

Date 22 January 2007



## CERTIFICATE FI 23142

Our Ref. 245556

**Product** Mains unit, switch mode  
**Type** SS-\*ES Active PFC \*3, SS-\*ET Active PFC \*3, SS-\*GB Active PFC \*3  
**Trade mark** Seasonic  
**Certificate Holder** Sea Sonic Electronics Co., Ltd.  
8F., No. 19, Alley 360, Sec. 1, Neihu Road, 114 Neihu, TAIPEI, TAIWAN  
**Manufacturer** Sea Sonic Electronics Co., Ltd.  
8F., No. 19, Alley 360, Sec. 1, Neihu Road, 114 Neihu, TAIPEI, TAIWAN  
**Technical information** 100-240Vac or 200-240Vac, 50/60Hz, 2.5A-9A. DC-Output: See appendix. Class I.  
**Other information** The 1st symbol "" in model numbering can be "300", "350" "400" or "500" to denote different output rating. (SS-\*ES Active PFC \*3, SS-\*ET Active PFC \*3)  
The 1st symbol "" in model numbering can be "330", "380" "430" or "500" to denote different output rating. (SS-\*GB Active PFC \*3)  
The 2nd symbol "" can be "F" or "T" to denote different input rating.

**The product is certified according to the following standard(s)** EN 60950-1:2001+A11:2004

**Validity** This certificate is valid until 30 November 2010 unless the standard in question has been amended or superseded with significant changes in requirements, in which case, SGS Fimko has the right to shorten the validity of the certificate based on the legislation of the European Union. This certificate includes the right to use the FI mark under the condition that changes (if any) will be checked at SGS Fimko before the product is brought onto market and that the conditions for FI certification are met.

**Directive information** The product(s) fulfils the essential safety requirements for CE conformity marking according to the Low Voltage Directive (2006/95/EC) at the date of issue of the certificate.

**Date of issue** 05 February 2007

**SGS Fimko Ltd**

**Signature**

*Matti Huttunen*  
Matti Huttunen  
Certification Engineer



This certificate has 2 appendixes



This certificate is issued under SGS Fimko general terms of delivery (available on request and accessible at [www.fi.sgs.com](http://www.fi.sgs.com)). The issuance of this certificate does not exonerate buyers or sellers from exercising all their rights and discharging all their liabilities under the Contract of Sale. Stipulations to the contrary are not binding on SGS Fimko. SGS Fimko's responsibility under this certificate is limited to proven negligence and will in no case be more than the amount of the fees or commission. Except by special arrangement, samples, if drawn, will not be retained by SGS Fimko for more than three months. Any unauthorized alteration, forgery or falsification of the content or appearance of this certificate is unlawful and offenders may be prosecuted to the fullest extent of the law.

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Business ID 0976538-5

Member of the SGS Group (SGS SA)

Appendix 1 to Certificate: 23142

**Manufacturing sites** Dong Guan Sea Sonic Electronics Co., Ltd., Zheng Keng Industrial Park, Yu Wu District, Dongcheng 523117, DONGGUAN, CHINA

**Additional information** The product has certificate 700981 issued by Intertek Semko AB in accordance with the Nordic Certification Service system.

**Model**

SS-300ES Active PFC F3 or SS-300ET Active PFC F3

Input: 100-240V, 50/60Hz, 5A. DC Output:

+3.3V(A)	+5V(A)	+12V1(A)	+12V2(A)	-12V(A/W)	+5Vsb(A/W)
18	20	17	17	0.8/9.6	2.5/12.5

+5V & +3.3V Max 120 W, +12V1&+12V2 Max 288W, Max Power 300W

SS-350ES Active PFC F3 or SS-350ET Active PFC F3

Input: 100-240V, 50/60Hz, 6A. DC Output:

20	20	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 130 W, +12V1&+12V2 Max 324W, Max Power 350W

SS-400ES Active PFC F3 or SS-400ET Active PFC F3

Input: 100-240V, 50/60Hz, 7A. DC Output:

20	20	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 130 W, +12V1&+12V2 Max 360W, Max Power 400W

SS-500ES Active PFC F3 or SS-500ET Active PFC F3

Input: 100-240V, 50/60Hz, 9A. DC Output:

24	24	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 130 W, +12V1&+12V2 Max 408W, Max Power 500W

SS-300ES Active PFC T3 or SS-300ET Active PFC T3

Input: 100-240V, 50/60Hz, 2.5A. DC Output:

18	20	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 120 W, +12V1&+12V2 Max 288W, Max Power 300W

SS-350ES Active PFC T3 or SS-350ET Active PFC T3

Input: 100-240V, 50/60Hz, 3A. DC Output:

20	20	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 130 W, +12V1&+12V2 Max 324W, Max Power 350W

SS-400ES Active PFC T3 or SS-400ET Active PFC T3

Input: 100-240V, 50/60Hz, 3.5A. DC Output:

20	20	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 130 W, +12V1&+12V2 Max 360W, Max Power 400W

SS-500ES Active PFC T3 or SS-500ET Active PFC T3

Input: 100-240V, 50/60Hz, 4.5A. DC Output:

24	24	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 130 W, +12V1&+12V2 Max 408W, Max Power 500W

SS-330GB Active PFC F3 Input 100-240V, 50/60Hz, 5A. DC Output:

18	20	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 120 W, +12V1&+12V2 Max 288W, Max Power 330W

SS-380GB Active PFC F3 Input 100-240V, 50/60Hz, 6A. DC Output:

20	20	17	17	0.8/9.6	2.5/12.5
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+5V & +3.3V Max 130 W, +12V1&+12V2 Max 324W, Max Power 380W

## Appendix 2 to Certificate: 23142

SS-430GB Active PFC F3 Input 100-240V, 50/60Hz, 7A. DC Output:  
+3.3V(A) +5V(A) +12V1(A) +12V2(A) -12V(A/W) +5Vsb(A/W)  
20 20 17 17 0.8/9.6 2.5/12.5  
+5V & +3.3V Max 130 W, +12V1&+12V2 Max 360W, Max Power 430W

SS-500GB Active PFC F3 Input 100-240V, 50/60Hz, 9A. DC Output:  
24 24 17 17 0.8/9.6 2.5/12.5  
+5V & +3.3V Max 130 W, +12V1&+12V2 Max 408W, Max Power 500W

SS-330GB Active PFC T3 Input 100-240V, 50/60Hz, 2.5A. DC Output:  
18 20 17 17 0.8/9.6 2.5/12.5  
+5V & +3.3V Max 120 W, +12V1&+12V2 Max 288W, Max Power 330W

SS-380GB Active PFC T3 Input 100-240V, 50/60Hz, 3A. DC Output:  
20 20 17 17 0.8/9.6 2.5/12.5  
+5V & +3.3V Max 130 W, +12V1&+12V2 Max 324W, Max Power 380W

SS-430GB Active PFC T3 Input 100-240V, 50/60Hz, 3.5A. DC Output:  
20 20 17 17 0.8/9.6 2.5/12.5  
+5V & +3.3V Max 130 W, +12V1&+12V2 Max 360W, Max Power 430W

SS-500GB Active PFC T3 Input 100-240V, 50/60Hz, 4.5A. DC Output:  
24 24 17 17 0.8/9.6 2.5/12.5  
+5V & +3.3V Max 130 W, +12V1&+12V2 Max 408W, Max Power 500W

Our ref. no.

245556

No. P07207518

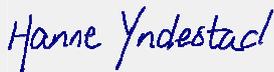
Accredited Certificate (ref. NA-PROD 001)

Order No.

81031

Applicant	Sea Sonic Electronics Co., Ltd. 8Fl., No. 19, Alley 360, Sec. 1, Neihu Road 114 Neihu TAIWAN
Manufacturer	Sea Sonic Electronics Co., Ltd. 8Fl., No. 19, Alley 360, Sec. 1, Neihu Road 114 Neihu TAIWAN
Factory	Dong Guan Sea Sonic Electronics Co., Ltd. Zheng Keng Industrial Park, Yu Wu District, 523117, Dongcheng Dongguan City, GD CHINA
Trade mark	Seasonic
Product	Power supply for building-in
Model/type	SS-.. ES Active PFC .3
Rating	See table page 3
Principal characteristics	Cl. I. The first dots “..” in model numbering may be 300, 350, 400 or 500, to denote the different output rating. The second dot “.” may be F or T to denote the different rating
Standard(s)	Safety std.: EN 60950-1:2001; A11, including possible listed national conditions/deviations for Norway.
Validity	This certificate documents conformity with the standards shown, and also applies as license for use of Nemko’s name and certification mark. The certificate and license is valid as long as the applicable conditions are complied with, and provided that any changes to the product are notified to Nemko for acceptance prior to implementation. New standards or amendments to the standards may imply that the product design must be updated and/or that re-testing and re-certification is necessary.
Additional information	Additional information on page 2
Variants	This Certificate also covers variants with Position No. from 001 to 002 See next page(s)

Date of issue 16 February 2007



signature

Hanne Yndestad

Certification Department

No. P07207518

Accredited Certificate (ref. NA-PROD 001)

Order No.

81031

## Additional Information:

The above certified equipment complies with current technical standard(s) in Norway regarding safety, as far as this can be checked. Compliance with requirements regarding building-in, protection against electric shock and Electromagnetic Compatibility (EMC) must be checked when the equipment is built-in a completed product or forms a part of a complete system. It should be noted that by marketing of equipment subject to official registration in Norway, the party responsible for the marketing shall be registered by the Norwegian Directorate for Product- and Electrical Safety.

The certification is based on Notification of Nordic Test Results from Intertek Semko AB no. 700981. The design is presupposed to be identical to the sample tested.

Product	Power supply for building-in
Position No	001
Model/type	SS-.. ET Active PFC .3
Rating and principal characteristics	See table page 4
Trade mark	Seasonic
Additional information	Cl. I. The first dots “..” in model numbering may be 300, 350, 400 or 500, to denote the different output rating. The second dot “.” may be F or T to denote the different rating
Product	Power supply for building-in
Position No	002
Model/type	SS-.. GB Active PFC .3
Rating and principal characteristics	See table page 5
Trade mark	Seasonic
Model/type	SS-.. ET Active
Additional information	Cl. I. The first dots “..” in model numbering may be 330, 380, 430 or 500, to denote the different output rating. The second dot “.” may be F or T to denote the different rating

Date of issue 16 February 2007



signature

Hanne Yndestad  
Certification Department

No. P07207518

Accredited Certificate (ref. NA-PROD 001)

Order No.

81031

Tables for input and output rating:

Model: SS-.. ES Active PFC .3:

Model	AC input ratings	DC output ratings								
		+3.3V (A)	+5V(A)	+12V1 (A)	+12V2 (A)	-12V (A)/(W)	+5Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. power (W)
SS-300ES Active PFC F3	5A 100-240V 50/60Hz	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-350ES Active PFC F3	6A 100-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-400ES Active PFC F3	7A 100-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-500ES Active PFC F3	9A 100-240V 50/60Hz	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500
SS-300ES Active PFC T3	2.5A 200-240V 50/60Hz	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-350ES Active PFC T3	3A 200-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-400ES Active PFC T3	3.5A 200-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-500ES Active PFC T3	4.5A 200-240V 50/60Hz	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500

Date of issue 16 February 2007



signature

Hanne Yndestad

Certification Department

No. P07207518

Accredited Certificate (ref. NA-PROD 001)

Order No.

81031

Model: SS-...ET Active PFC .3:

Model	AC input ratings	DC output ratings								
		+3.3V (A)	+5V(A)	+12V1 (A)	+12V2 (A)	-12V (A)/(W)	+5Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. power (W)
SS-300ET Active PFC F3	5A 100-240V 50/60Hz	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-350ET Active PFC F3	6A 100-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-400ET Active PFC F3	7A 100-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-500ET Active PFC F3	9A 100-240V 50/60Hz	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500
SS-300ET Active PFC T3	2.5A 200-240V 50/60Hz	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-350ET Active PFC T3	3A 200-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-400ET Active PFC T3	3.5A 200-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-500ET Active PFC T3	4.5A 200-240V 50/60Hz	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500

Date of issue 16 February 2007



signature

Hanne Yndestad

Certification Department

No. P07207518

Accredited Certificate (ref. NA-PROD 001)

Order No.

81031

Model: SS-...GB Active PFC .3:

Model	AC input ratings	DC output ratings								
		+3.3V (A)	+5V(A)	+12V1 (A)	+12V2 (A)	-12V (A)/(W)	+5Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. power (W)
SS-330GB Active PFC F3	5A 100-240V 50/60Hz	18	20	17	17	0.8/9.6	2.5/12.5	120	288	330
SS-380GB Active PFC F3	6A 100-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	324	380
SS-430GB Active PFC F3	7A 100-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	360	430
SS-500GB Active PFC F3	9A 100-240V 50/60Hz	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500
SS-330GB Active PFC T3	2.5A 200-240V 50/60Hz	18	20	17	17	0.8/9.6	2.5/12.5	120	288	330
SS-380GB Active PFC T3	3A 200-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	324	380
SS-430GB Active PFC T3	3.5A 200-240V 50/60Hz	20	20	17	17	0.8/9.6	2.5/12.5	130	360	430
SS-500GB Active PFC T3	4.5A 200-240V 50/60Hz	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500

Date of issue 16 February 2007



signature

Hanne Yndestad

Certification Department

# Demko Certificate

**Product:** Building-in power supply for business machines  
**Manufacturer:** Sea Sonic Electronics Co., Ltd.  
8F., No. 19, Alley 360, Sec. 1  
Neihu Road, 114 Neihu, Taipei, Taiwan  
**Production site:** Dong Guan Sea Sonic Electronics Co., Ltd.  
Zheng Keng Industrial Park  
Yu Wu District, 523117, Dongcheng, Dongguan City, GD, China  
**Certified by request of:** Same as manufacturer  
**Trademark:** Seasonic  
**Model/Type ref.:** See appendix  
**Rated current or power:** See appendix  
**Rated voltage:** 100-240 V, 50/60 Hz  
**Insulation Class:** I  
**Degree of protection:** -  
**Additional information:**

A sample of the product has been tested and found in conformity with EN 60950-1:2001 + A11:2004.

Date of expiry: 2010-12-01

Furthermore, the product complies with the national deviations in Denmark.

*UL International Demko A/S is a body notified to the Member States and Commission of the European Communities according to the provisions of Article 8 of the Low Voltage Directive.*

*The Manufacturer complies with the Production Surveillance Requirements. Products included in this certificate are allowed to carry the registered approval marks of UL International Demko A/S, or for cables <DEMKO>. The name of UL International Demko A/S can be used in the marketing of the products.*

*This Statement is only valid for products, which are identical to the tested product, and manufactured at the above-mentioned production site(s). UL International Demko A/S has to be informed in writing about any changes, in accordance with the "UL International Demko A/S Standard Terms and Conditions" for UL International Demko A/S services. The validity of this certificate is shortened if the EU legislation requires re-testing and re-certification, due to new standards or amendments coming into force, before the expiry date.*

Herlev, 2007-01-29

  
Karina Christiansen  
Certification Manager

## UL International Demko A/S

Lyskaer 8, P.O. Box 514  
DK-2730 Herlev, Denmark  
Telephone: +45 44856565  
Fax: +45 44856500



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**Underwriters  
Laboratories Inc.®**

## Appendix to Demko Certificate No. 314165-01

The Certificate covers the following:

Model	AC input ratings	DC output ratings								
		+3.3 V (A)	+5 V (A)	+12 V1 (A)	+12 V2 (A)	-12 V (A)/(W)	+5 Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. Power (W)
SS-300ES Active PFC F3	100-240 V, 50/60 Hz, 5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ES Active PFC F3	100-240 V, 50/60 Hz, 6 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ES Active PFC F3	100-240 V, 50/60 Hz, 7 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ES Active PFC F3	100-240 V, 50/60 Hz, 9 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500
SS-300ES Active PFC T3	200-240 V, 50/60 Hz, 2.5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ES Active PFC T3	200-240 V, 50/60 Hz, 3 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ES Active PFC T3	200-240 V, 50/60 Hz, 3.5 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ES Active PFC T3	200-240 V, 50/60 Hz, 4.5 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500

Herlev, 2007-01-29

  
 Karina Christiansen  
 Certification Manager

### UL International Demko A/S

Lyskaer 8, P.O. Box 514  
 DK-2730 Herlev, Denmark  
 Telephone: +45 44856565  
 Fax: +45 44856500



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 Laboratories Inc.®**

## Appendix to Demko Certificate No. 314165-01

Model	AC input ratings	DC output ratings								
		+3.3 V (A)	+5 V (A)	+12 V1 (A)	+12 V2 (A)	-12 V (A)/(W)	+5 Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. Power (W)
SS-300ET Active PFC F3	100-240 V, 50/60 Hz, 5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ET Active PFC F3	100-240 V, 50/60 Hz, 6 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ET Active PFC F3	100-240 V, 50/60 Hz, 7 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ET Active PFC F3	100-240 V, 50/60 Hz, 9 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500
SS-300ET Active PFC T3	200-240 V, 50/60 Hz, 2.5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	300
SS-350ET Active PFC T3	200-240 V, 50/60 Hz, 3 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	350
SS-400ET Active PFC T3	200-240 V, 50/60 Hz, 3.5 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	400
SS-500ET Active PFC T3	200-240 V, 50/60 Hz, 4.5 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500

Herlev, 2007-01-29

  
 Karina Christensen  
 Certification Manager

### UL International Demko A/S

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## Appendix to Demko Certificate No. 314165-01

Model	AC input ratings	DC output ratings								
		+3.3 V (A)	+5 V (A)	+12 V1 (A)	+12 V2 (A)	-12 V (A)/(W)	+5 Vsb (A)/(W)	+5V & +3.3V Max. (W)	+12V1 & +12V2 Max. (W)	Max. Power (W)
SS-330GB Active PFC F3	100-240 V, 50/60 Hz, 5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	330
SS-380GB Active PFC F3	100-240 V, 50/60 Hz, 6 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	380
SS-430GB Active PFC F3	100-240 V, 50/60 Hz, 7 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	430
SS-500GB Active PFC F3	100-240 V, 50/60 Hz, 9 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500
SS-330GB Active PFC T3	200-240 V, 50/60 Hz, 2.5 A	18	20	17	17	0.8 / 9.6	2.5 / 12.5	120	288	330
SS-380GB Active PFC T3	200-240 V, 50/60 Hz, 3 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	324	380
SS-430GB Active PFC T3	200-240 V, 50/60 Hz, 3.5 A	20	20	17	17	0.8 / 9.6	2.5 / 12.5	130	360	430
SS-500GB Active PFC T3	200-240 V, 50/60 Hz, 4.5 A	24	24	17	17	0.8 / 9.6	2.5 / 12.5	130	408	500

The certificate has been issued on the basis of Nordic certification Service, certificate No. 700981, issued by Intertek ETL Semko, dated 2007-01-22.

Herlev, 2007-01-29

  
 Karina Christiansen  
 Certification Manager

### UL International Demko A/S

Lyskaer 8, P.O. Box 514  
 DK-2730 Herlev, Denmark  
 Telephone: +45 44856565  
 Fax: +45 44856500



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 Laboratories Inc.**



Ref. Certif. No.

DE 3 - 54933

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

### CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product

Produit

Name and address of the applicant

Nom et adresse du demandeur

Name and address of the manufacturer

Nom et adresse du fabricant

Name and address of the factory

Nom et adresse de l'usine

Rating and principal characteristics

Valeurs nominales et caractéristiques principales

Trade mark (if any)

Marque de fabrique (si elle existe)

Model/type Ref.

Ref. de type

Additional information (if necessary)

Information complémentaire (si nécessaire)

A sample of the product was tested and found to be in conformity with

Un échantillon de ce produit a été essayé et a été considéré conforme à la

as shown in the Test Report Ref. No.

which form part of this certificate

comme indiqué dans le Rapport d'essais numéro de référence qui constitue une partie de ce certificat

Power supply

( Switching Power Supply )

Sea Sonic Electronics Co.,Ltd.

8F, No.19, Alley 360, Sec.1

114 Neihu Rd., Neihu, Taipei, TAIWAN

Sea Sonic Electronics Co.,Ltd., 8F, No.19, Alley 360, Sec.1, 114

Neihu Rd., Neihu, Taipei, TAIWAN

Dong Guan Sea Sonic Electronics Co., Ltd., Zheng Keng

Ind.Park,Yu Wu Di., 523117 Dongcheng Dongguan City,GD,

PEOPLE'S REPUBLIC OF CHINA

Rated input voltage:

100-240 Vac or 200-240 Vac

Rated input current;

See appendix

Rated frequency:

50/60 Hz

Rated output:

See appendix

Protection class:

I

Seasonic

SS-xES Active PFC z3, SS-xET Active PFC z3,

SS-yGB Active PFC z3 ( "x" can be 300, 350, 400 or 500

to denote different output rating; "y" can be 330, 380, 430

or 500 to denote different output rating; "z" can be F or T

to denote different input rating )

IEC 60950-1:2001

TÜV SÜD Product Service

081-60823-000

This CB Test Certificate is issued by the National Certification Body

Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

Date,

2006-08-18

CB 06 08 52876 065

Erich Thurner



TÜV SÜD Product Service GmbH · Certification Body · Ridlerstrasse 65 · D-80339 München

Product Service

## Appendix to CB Certificate

### Brief description of the test sample:

- The equipment is switching power supply (built-in type) for use in information technology equipments.

### The input rating and output rating of the models are as below:

Model-#	AC Input Rating	DC Output Rating								
		+3.3V (A)	+5V (A)	+12V1 (A)	+12V2 (A)	-12V (A)/(W)	+5Vsb (A)/(W)	+5V & +3.3V max. (W)	+12V1 & +12V2 max. (W)	Max. Power (W)
SS-300ES Active PFC F3 SS-300ET Active PFC F3	100-240V, 50/60Hz, 5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-330GB Active PFC F3	100-240V, 50/60Hz, 5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	330
SS-350ES Active PFC F3 SS-350ET Active PFC F3	100-240V, 50/60Hz, 6A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-380GB Active PFC F3	100-240V, 50/60Hz, 6A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	380
SS-400ES Active PFC F3 SS-400ET Active PFC F3	100-240V, 50/60Hz, 7A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-430GB Active PFC F3	100-240V, 60/60Hz, 7A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	430
SS-500ES Active PFC F3 SS-500ET Active PFC F3 SS-500GB Active PFC F3	100-240V, 50/60Hz, 9A	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500
SS-300ES Active PFC T3 SS-300ET Active PFC T3	200-240V, 50/60Hz, 2.5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	300
SS-330GB Active PFC T3	200-240V, 50/60Hz, 2.5A	18	20	17	17	0.8/9.6	2.5/12.5	120	288	330
SS-350ES Active PFC T3 SS-350ET Active PFC T3	200-240V, 50/60Hz, 3A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	350
SS-380GB Active PFC T3	200-240V, 50/60Hz, 3A	20	20	17	17	0.8/9.6	2.5/12.5	130	324	380
SS-400ES Active PFC T3 SS-400ET Active PFC T3	200-240V, 50/60Hz, 3.5A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	400
SS-430GB Active PFC T3	200-240V, 60/60Hz, 3.5A	20	20	17	17	0.8/9.6	2.5/12.5	130	360	430
SS-500ES Active PFC T3 SS-500ET Active PFC T3 SS-500GB Active PFC T3	200-240V, 50/60Hz, 4.5A	24	24	17	17	0.8/9.6	2.5/12.5	130	408	500

Date, 2006-08-18

Signature:

  
 Erich Thurner


Product Service



**Underwriters  
Laboratories Inc.**

**West Coast Division**  
**Santa Clara Office**  
1655 Scott Boulevard  
Santa Clara, CA 95050-4169 USA  
www.ul.com  
tel: 1 408 985 2400  
Customer service: 1 877 854 3577

**NOTICE OF AUTHORIZATION TO APPLY THE UL MARK**

July 28, 2006

SEA SONIC ELECTRONICS CO LTD  
8TH FL  
19 ALLEY 360 NEIHU RD, SEC 1  
NEIHU, TAIPEI TAIWAN

c/o Superior Product Consulting Inc  
Hsin-Tien, Taipei Taiwan

Attention: Mr. Frank Hsu

Reference: File E104405, Project 06CA37268

Fax number: 011-886-2-2918-4517

Subject: USR/CNR - Power Supply, Models SS-xES Active PFC z3, SS-xET Active PFC z3, SS-yGB Active PFC and EA-y where "x" can be 300, 350, 400, 500; where "y" can be 330, 380, 430 or 500, "z" can be F or T.

Dear Mr. Hsu,

UL's investigation of your product has been completed under the above project number and the subject product was determined to comply with the applicable requirements.

This letter temporarily supplements the UL Follow-Up Services Procedure and serves as authorization to apply the UL Recognized Marking and/or Recognized Component Mark only at the factory under UL's Follow-Up Service Program to the subject product, which is constructed as described below:

Similar to the subject model, which was submitted to UL for this investigation. The UL Records covering the product will be in the Follow-Up Services Procedure, File E104405, Volume 1

This authorization applies only to the address on this letter.

An independent organization working for a safer world with integrity, precision and knowledge.





**West Coast Division**  
Santa Clara Office  
1655 Scott Boulevard  
Santa Clara, CA 95050-4169 USA  
www.ul.com  
tel: 1 408 985 2400  
Customer service: 1 877 854 3577

This authorization is effective from the date of this Notice and only for products at the indicated manufacturing locations. Records in the Follow-Up Services Procedure covering the product are now being prepared and will be sent to the indicated manufacturing locations in the near future. Please note that Follow-Up Services Procedures are sent to the manufacturers only unless the Applicant specifically requests this document.

Products that bear the UL Mark shall be identical to those that were evaluated by UL and found to comply with UL's requirements. If changes in construction are discovered, appropriate action will be taken for products not in conformance with UL's requirements and continued use of the UL Mark may be withdrawn.

Sincerely,

Vincent Wan  
Project Engineer  
Department: 3000FTRT  
E-mail: Vincent.Wan@ca.ul.com

Reviewed by:

Benjamin Mapes  
Staff Engineer  
Department: 3819DSCL  
E-mail: Benjamin.J. Mapes @us.ul.com

"Any information and documentation provided to you involving UL Mark services are provided on behalf of Underwriters Laboratories Inc."

An independent organization working for a safer world with integrity, precision and knowledge.

