

CERTIFICATE No. P02100800

Accredited Certificate (ref. NA-PROD 016)

Order No. 200301138

Group 63 92000
Position No
Model/type
Data
Other specification

Build-in power supplies
004
FSP550-60PLN..
10A 100-240V 50-60Hz
Brand name: SPI
Cl. I, Power Supply for building-in
DC output: 27.0A +3.3V, 29.0A +5V, 18.0A +12.0V I/O, 18.0A+12V CPU,
2.0A +5Vsb, 0.3A -5V (optional), 0.8A -12V
Max. output power: 550W (max. ambient 30°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =528W max.) or
max. output power: 500W (max. ambient 50°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =478W max.)
The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose
only.


Group 63 92000
Position No
Model/type
Data
Other specification

Build-in power supplies
005
FSP550-60PLN..
10A 100-240V 50-60Hz
Brand name: Aopen
Cl. I, Power Supply for building-in
DC outputs: 27.0A +3.3V, 29.0A +5V, 18.0A +12.0V I/O, 18.0A+12V CPU,
2.0A +5Vsb, 0.3A -5V (optional), 0.8A -12V
Max. output power: 550W (max. ambient 30°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =528W max.) or
max. output power: 500W (max. ambient 50°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =478W max.)
The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose
only.

Group 63 92000
Position No
Model/type
Data
Other specification

Build-in power supplies
006
FSP550-60PLG..
10A 100-240V 50-60Hz
Cl. I, Power Supply for building-in
DC outputs: 27.0A +3.3V, 29.0A +5V, 36.0A +12.0V I/O, 2.0A +5Vsb,
0.3A -5V (optional), 0.8A -12V
Max. output power: 550W (max. ambient 30°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =528W max.) or
max. output power: 500W (max. ambient 50°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =478W max.)
The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose
only.

Date of issue: 07 January 2003



signature

Skule Moe

Certification Department

Nemko AS
P.O. Box 73, Blindern
N-0314 Oslo, Norway

Office address
Gaustadalléen 30
Oslo

Telephone
+47 22 96 03 30
Enterprise number:

Fax
+47 22 96 05 50
NO 974404532

CERTIFICATE No. P02100800

Accredited Certificate (ref. NA-PROD 016)

Order No. 200301138

Group 63 92000
Position No
Model/type
Data
Other specification

Build-in power supplies
007
FSP550-60PLG..
10A 100-240V 50-60Hz
Brand name: SPI
Cl. I, Power Supply for building-in
DC outputs: 27.0A +3.3V, 29.0A +5V, 36.0A +12.0V I/O, 2.0A +5Vsb,
0.3A -5V (optional), 0.8A -12V
Max. output power: 550W (max. ambient 30°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =528W max.) or
max. output power: 500W (max. ambient 50°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =478W max.)
The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose
only.

Group 63 92000
Position No
Model/type
Data
Other specification

Build-in power supplies
008
FSP550-60PLG..
10A 100-240V 50-60Hz
Brand name: Aopen
Cl. I, Power Supply for building-in
DC outputs: 27.0A +3.3V, 29.0A +5V, 36.0A +12.0V I/O, 2.0A +5Vsb,
0.3A -5V (optional), 0.8A -12V
Max. output power: 550W (max. ambient 30°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =528W max.) or
max. output power: 500W (max. ambient 50°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =478W max.)
The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose
only.

Group 63 92000
Position No
Model/type
Data
Other specification

Build-in power supplies
009
ACE-850AP
10A 100-240V 50-60Hz
BRAND NAME: ICP
Cl. I, Power Supply for building-in
DC-outputs: 27.0A +3.3V, 29.0A +5V, 18.0A +12V I/O, 18.0A +12V CPU,
2.0A +5Vsb, 0.3A -5V (optional), 0.8A -12V
Max. output power: 550W (max. ambient 30°C)
(+3.3V & +5V = 150W max.) (+3.3V & +5V & +12V =528W max.) or
max. output power: 500W (max. ambient 50°C)
(+3.3V & +5V =150W max.) (+3.3V & +5V & +12V =478W max.)

Date of issue 07 January 2003



signature
Skule Moe
Certification Department

CERTIFICATE No. P02100800

Accredited Certificate (ref. NA-PROD 016)

Order No. 200301138

Factory

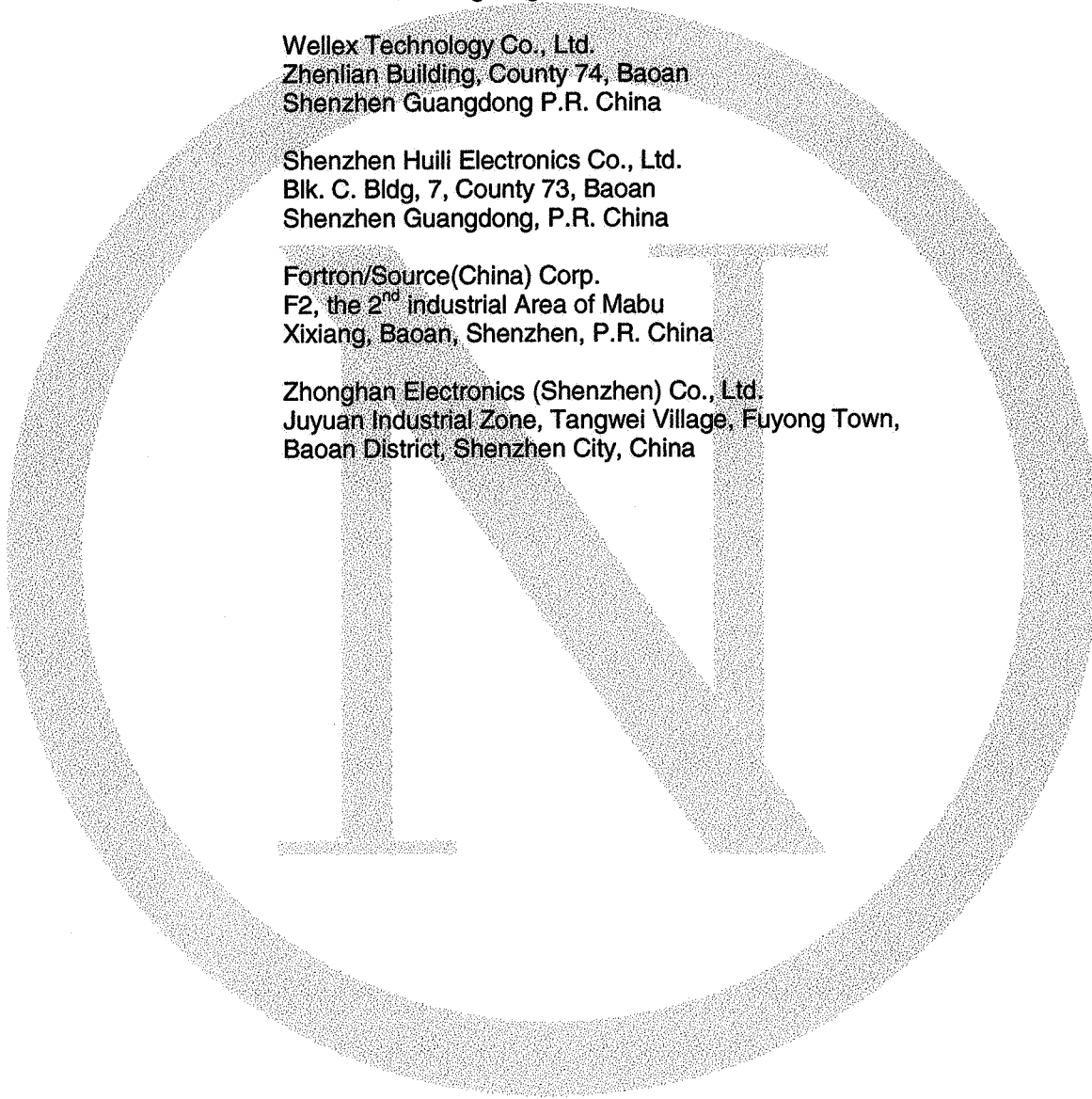
Fortron/Source(China) Corp.
Building #25, Zone 37, Baoan District
Shenzhen, Guangdong, P.R. China

Wellex Technology Co., Ltd.
Zhenlian Building, County 74, Baoan
Shenzhen Guangdong P.R. China

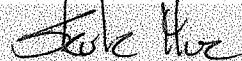
Shenzhen Huili Electronics Co., Ltd.
Blk. C. Bldg, 7, County 73, Baoan
Shenzhen Guangdong, P.R. China

Fortron/Source(China) Corp.
F2, the 2nd industrial Area of Mabu
Xixiang, Baoan, Shenzhen, P.R. China

Zhonghan Electronics (Shenzhen) Co., Ltd.
Juyuan Industrial Zone, Tangwei Village, Fuyong Town,
Baoan District, Shenzhen City, China



Date of issue 07 January 2003



signature

Skule Moe

Certification Department

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N-0314 Oslo, Norway

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Telephone
+47 22 96 03 30
Enterprise number:

Fax
+47 22 96 05 50
NO 974404532

CERTIFICATE No. P02100800

Accredited Certificate (ref. NA-PROD 016)

Order No. 200230270

Applicant FSP Group Inc.
No. 22
Jianguo E. Rd.
Taoyuan City 330
TAIWAN R.O.C.

Manufacturer FSP Group Inc.
No. 22
Jianguo E. Rd.
Taoyuan City 330
TAIWAN R.O.C.

Factory See page 4

Group 63 92000 Build-in power supplies

Model/type FSP460-60PFN..

Data AC I/P: 10A 100-240V 50-60Hz

Other specification Cl. I, Power Supply for building-in. AC O/P (optional):2A 100-240V., DC output: 27.0A/ +3.3V, 29.0A/ +5V, 15.0A/ +12.0V I/O, 16.5A/ +12V CPU, 2.0A/ +5Vsb, 0.3A/ -5V (optional), 0.8A/ -12V Max. output power is 460W, +3.3V & 5V output is 200W max. The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only.

The changes concern Changed -5V to optional for model FSP460-60PFN and addition of two new models.

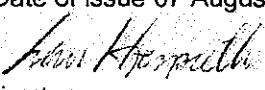
The above product is certified according to the following standard(s) Safety std.: EN 60950 (1992) A1/A2/A3/A4/A11, including possible listed national conditions/deviations for Norway.


Validity The addendum together with the original certificate, and possible previous addendum/addenda, documents conformity with the standards shown. The certification 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 4

Variants This addendum also covers variants with Position No. from 001 to 008. See next page(s)

Date of issue 07 August 2002


signature
Lars Hjerpseth
Head of section


signature
Line Martinussen

CERTIFICATE No. P02100800

Accredited Certificate (ref. NA-PROD 016)

Order No. 200230270

| | |
|---------------------|---|
| Group 63 92000 | Build-in power supplies |
| Position No | 001 |
| Model/type | FSP460-60PFN.. |
| Data | AC I/P: 10A 100-240V 50-60Hz |
| Other specification | Brand name: SPI. Cl. I, Power Supply for building-in. AC O/P (optional): 2A, 100-240V. DC output: 27.0A/ +3.3V, 29.0A/ +5V, 15.0A/ +12.0V I/O, 16.5A/ +12V CPU, 2.0A/ +5Vsb, 0.3A/ -5V (optional), 0.8A/ -12V Max. output power is 460W, +3.3V & +5V output is 200W max. The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |
| Group 63 92000 | Build-in power supplies |
| Position No | 002 |
| Model/type | FSP460-60PFN.. |
| Data | AC I/P: 10A 100-240V 50-60Hz |
| Other specification | Brand name: AOpen. Cl. I, Power Supply for building-in. AC O/P (Optional): 2A, 100-240V. DC output: 27.0A/ +3.3V, 29.0A/ +5V, 15.0A/ +12.0V I/O, 16.5A/ +12V CPU, 2.0A/ +5Vsb, 0.3A/ -5V (optional), 0.8A/ -12V Max. output power is 460W, +3.3V & +5V output is 200W max. The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |
| Group 63 92000 | Build-in power supplies |
| Position No | 003 |
| Model/type | FSP550-60PLN.. |
| Data | 10A 100-240V 50-60Hz |
| Other specification | Cl. I, Power Supply for building-in. DC output: 27.0A/ +3.3V, 29.0A/ +5V, 18.0A/ +12.0V I/O, 18.0A/ +12V CPU 2.0A/ +5Vsb, 0.3A/ -5V, (optional), 0.8A/ -12V Max. output power: 550W (max. ambient 30° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V=528W max.) or max. output power: 500W (max. ambient 50° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V =478W max.) The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |
| Group 63 92000 | Build-in power supplies |
| Position No | 004 |
| Model/type | FSP550-60PLN.. |
| Data | 10A 100-240V 50-60Hz |
| Other specification | Brand name: SPI. Cl. I, Power Supply for building-in. DC output: 27.0A/ +3.3V, 29.0A/ +5V, 18.0A/ +12.0V I/O, 18.0A/ +12V CPU 2.0A/ +5Vsb, 0.3A/ -5V, (optional), 0.8A/ -12V Max. output power: 550W (max. ambient 30° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V=528W max.) or max. output power: 500W (max. ambient 50° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V =478W max.) The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |

Date of issue 07 August 2002



signature

Lars Hjerpseth

Head of section



signature

Line Martinussen

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Fax
+47 22 96 05 50
NO 974404532

CERTIFICATE No. P02100800

Accredited Certificate (ref. NA-PROD 016)

Order No. 200230270

| | |
|---------------------|--|
| Group 63 92000 | Build-in power supplies |
| Position No | 005 |
| Model/type | FSP550-60PLN.. |
| Data | 10A 100-240V 50-60Hz |
| Other specification | Brand name: AOpen. Cl. I, Power Supply for building-in. DC output: 27.0A/ +3.3V, 29.0A/ +5V, 18.0A/ +12.0V I/O, 18.0A/+12V CPU 2.0A/ +5Vsb, 0.3A/ -5V, (optional), 0.8A/ -12V Max. output power: 550W (max. ambient 30° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V=528W max.) or max. output power: 500W (max. ambient 50° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V =478W max.) The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |
| Group 63 92000 | Build-in power supplies |
| Position No | 006 |
| Model/type | FSP550-60PLG.. |
| Data | 10A 100-240V 50-60Hz |
| Other specification | Cl. I, DC output: 27.0A/ +3.3V, 29.0A/ +5V, 36.0A/ +12.0V I/O, 2.0A/ +5Vsb, 0.3A/ -5V, (optional), 0.8A/ -12V Max. output power: 550W (max. ambient 30° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V=528W max.) or max. output power: 500W (max. ambient 50° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V =478W max.) The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |
| Group 63 92000 | Build-in power supplies |
| Position No | 007 |
| Model/type | FSP550-60PLG.. |
| Data | 10A 100-240V 50-60Hz |
| Other specification | Brand name: SPI. Cl. I, DC output: 27.0A/ +3.3V, 29.0A/ +5V, 36.0A/ +12.0V I/O, 2.0A/ +5Vsb, 0.3A/ -5V, (optional), 0.8A/ -12V Max. output power: 550W (max. ambient 30° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V=528W max.) or max. output power: 500W (max. ambient 50° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V =478W max.) The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |
| Group 63 92000 | Build-in power supplies |
| Position No | 008 |
| Model/type | FSP550-60PLG.. |
| Data | 10A 100-240V 50-60Hz |
| Other specification | Brand name: AOpen. . Cl. I, DC output: 27.0A/ +3.3V, 29.0A/ +5V, 36.0A/ +12.0V I/O, 2.0A/ +5Vsb, 0.3A/ -5V, (optional), 0.8A/ -12V Max. output power: 550W (max. ambient 30° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V=528W max.) or max. output power: 500W (max. ambient 50° C) (+3.3V & +5V=150W max.) (+3.3V & +5V & +12V =478W max.) The dots in model name can be A to Z, 0 to 9 or blank, for marketing purpose only. |

Date of issue 07 August 2002



signature

Lars Hjerpseth

Head of section



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Oslo

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Enterprise number:

Fax
+47 22 96 05 50
NO 974404532

CERTIFICATE No. P02100800

Accredited Certificate (ref. NA-PROD 016)

Order No. 200230270

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.

Factory Sites:

Fortron/Source(China) Corp.
Building #25, Zone 37, Baoan District
Shenzhen, Guangdong, P.R. China

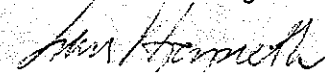
Wellex Technology Co., Ltd.
Zhenlian Building, County 74, Baoan
Shenzhen Guangdong P.R. China

Shenzhen Huili Electronics Co., Ltd.
Blk. C. Bldg, 7, County 73, Baoan
Shenzhen Guangdong, P.R. China

Fortron/Source(China) Corp.
F2, the 2nd industrial Area of Mabu
Xixiang, Baoan, Shenzhen, P.R. China

Zhonghan Electronics (Shenzhen) Co., Ltd.
Juyuan Industrial Zone, Tangwei Village, Fuyong Town,
Baoan District, Shenzhen City, China

Date of issue 07 August 2002



signature

Lars Hjerpseth

Head of section



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Telephone
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Enterprise number:

Fax
+47 22 96 05 50
NO 974404532

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50013082

Blatt *Page*
0007

Ihr Zeichen *Client Reference*
RH

Unser Zeichen *Our Reference*
ZTW1-LMW- 10003519 003

Ausstellungsdatum
29.08.2002

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*

FSP Group Inc.
No.22, Jianguo E. Road
Taoyuan 330
Taiwan, R.O.C.

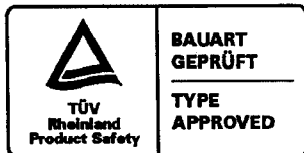
Fertigungsstätte *Manufacturing Plant*

Fortron/Source (China) Corp.
F2, The 2nd. Industrial Area
of Mabu, Xixiang, Baoan Area
Shenzhen, Guangdong
P.R. China

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*

EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

wie Blatt (as page) 01

Ergänzung
(Addition)

| | | |
|-----------------------------------|--|---|
| Bezeichnung (Type Designation) | : FSP550-60PLNXX | 1 |
| | : FSP550-60PLGXX | 1 |
| X steht für (stands for) | : 0-9, A-Z oder (or) freibleibend (blank) | 1 |

max. Umgebungstemperatur : 50°C (500W)
(max. Ambient Temperature) 30°C (550W)

Ausgänge: siehe Aufbau-Übersicht
(Outputs) (see constructional dataform)

max. Ausgangsleistung für +3V & +5V : 150W
(max. Output Power for +3V & +5V)

max. Ausgangsleistung für +3V & +5V & +12V: 478W (500W)
(max. Output Power for +3V & +5V & +12V) 528W (550W)

max. Ausgangsleistung : 500W
(max. Output Power) 550W



3

ANLAGE (Appendix): 1.1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50013245

Blatt *Page*
0003

Ihr Zeichen *Client Reference*
RH

Unser Zeichen *Our Reference*
ZTW1-LMW- 10003519 003

Ausstellungsdatum
29.08.2002

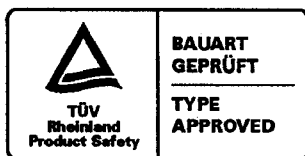
Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Sparkle Power Inc.
1000 Rock Ave.,
San Jose, CA 95131
USA

Fertigungsstätte *Manufacturing Plant*
Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

wie Blatt (as page) 01

Ergänzung (Addition)

| | | |
|--------------------------------|---|---|
| Bezeichnung (Type Designation) | : a) FSP550-60PLGXX | 1 |
| | b) FSP550-60PLNXX | 1 |
| X steht für (stands for) | : 0-9, A-Z oder (or) freibleibend (blank) | 1 |

max. Umgebungstemperatur (max. Ambient Temperature) : 50°C (500W) 30°C (550W)

Ausgänge: a) DC +3.3V/27.0A, +5V/29.0A, 12.0V/36.0A, +5Vsb/2.0A, -5V/0.3A (optional), -12V/0.8A
b) DC +3.3V/27.0A, +5V/29.0A, +12V/18.0A CPU +12.0V/18.0A I/O, +5Vsb/2.0A, -5V/0.3A (optional), -12V/0.8A

max. Ausgangsleistung für +3V & +5V (max. Output Power for +3V & +5V) : 150W

max. Ausgangsleistung für +3V & +5V & +12V: 528W (550W) (max. Output Power for +3V & +5V & +12V) 478W (500W)

max. Ausgangsleistung (max. Output Power) : 500W 550W



Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50013245

Blatt *Page*
0003

Ihr Zeichen *Client Reference*
RH

Unser Zeichen *Our Reference*
ZTW1-LMW- 10003519 003

Ausstellungsdatum
29.08.2002

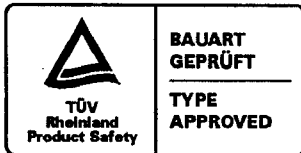
Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
Sparkle Power Inc.
1000 Rock Ave.,
San Jose, CA 95131
USA

Fertigungsstätte *Manufacturing Plant*
Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

wie Blatt (as page) 01

Ergänzung (Addition)

Bezeichnung : a) FSP550-60PLGXX 1
(Type Designation) b) FSP550-60PLNXX 1
X steht für : 0-9, A-Z oder (or) 1
(stands for) freibleibend (blank)

max. Umgebungstemperatur : 50°C (500W)

(max. Ambient Temperature) 30°C (550W)

Ausgänge: a) DC +3.3V/27.0A, +5V/29.0A, 12.0V/36.0A,
(Outputs) +5Vsb/2.0A, -5V/0.3A (optional), -12V/0.8A

b) DC +3.3V/27.0A, +5V/29.0A, +12V/18.0A CPU
+12.0V/18.0A I/O, +5Vsb/2.0A,
-5V/0.3A (optional), -12V/0.8A

max. Ausgangsleistung für +3V & +5V : 150W

(max. Output Power for +3V & +5V)

max. Ausgangsleistung für +3V & +5V & +12V: 528W (550W)

(max. Output Power for +3V & +5V & +12V) 478W (500W)

max. Ausgangsleistung : 500W

(max. Output Power) 550W



3

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50015268

Blatt *Page*
0003

Ihr Zeichen *Client Reference*
RH

Unser Zeichen *Our Reference*
ZTW1-LMW- 10003519 003

Ausstellungsdatum
29.08.2002

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*

Aopen Incorporated
3F, No.19-8, San Chung Road
Nan Kang Area, Taipei 115
Taiwan, R.O.C.

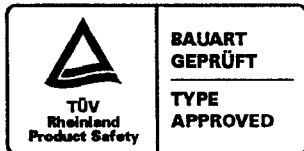
Fertigungsstätte *Manufacturing Plant*

Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*

EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

wie Blatt (as page) 01

Ergänzung (Addition)

| | | |
|--------------------------------|---|---|
| Bezeichnung (Type Designation) | : a) FSP550-60PLGXX | 1 |
| | b) FSP550-60PLNXX | 1 |
| X steht für (stands for) | : 0-9, A-Z oder (or) freibleibend (blank) | 1 |

max. Umgebungstemperatur : 50°C (500W)

(max. Ambient Temperature) 30°C (550W)

Ausgänge: a) DC +3.3V/27.0A, +5V/29.0A, 12.0V/36.0A,
(Outputs) +5Vsb/2.0A, -5V/0.3A (optional), -12V/0.8A

b) DC +3.3V/27.0A, +5V/29.0A, +12V/18.0A CPU
+12.0V/18.0A I/O, +5Vsb/2.0A,
-5V/0.3A (optional), -12V/0.8A

max. Ausgangsleistung für +3V & +5V : 150W

(max. Output Power for +3V & +5V)

max. Ausgangsleistung für +3V & +5V & +12V: 528W (550W)

(max. Output Power for +3V & +5V & +12V) 478W (500W)

max. Ausgangsleistung : 500W

(max. Output Power) 550W



3

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50015268

Blatt *Page*
0003

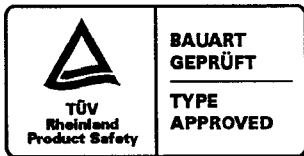
| Ihr Zeichen <i>Client Reference</i> | Unser Zeichen <i>Our Reference</i> | Ausstellungsdatum | <i>Date of Issue</i> (day/month/yr) |
|-------------------------------------|------------------------------------|-------------------|--|
| RH | ZTW1-LMW- 10003519 003 | 29.08.2002 | |

Genehmigungsinhaber *License Holder*
Aopen Incorporated
3F, No.19-8, San Chung Road
Nan Kang Area, Taipei 115
Taiwan, R.O.C.

Fertigungsstätte *Manufacturing Plant*
Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

wie Blatt (as page) 01
Ergänzung (Addition)

| | | |
|--------------------------------|---|---|
| Bezeichnung (Type Designation) | : a) FSP550-60PLGXX | 1 |
| | b) FSP550-60PLNXX | 1 |
| X steht für (stands for) | : 0-9, A-Z oder (or) freibleibend (blank) | 1 |

max. Umgebungstemperatur (max. Ambient Temperature) : 50°C (500W) 30°C (550W)

Ausgänge: a) DC +3.3V/27.0A, +5V/29.0A, 12.0V/36.0A, +5Vsb/2.0A, -5V/0.3A (optional), -12V/0.8A
b) DC +3.3V/27.0A, +5V/29.0A, +12V/18.0A CPU +12.0V/18.0A I/O, +5Vsb/2.0A, -5V/0.3A (optional), -12V/0.8A

max. Ausgangsleistung für +3V & +5V : 150W
(max. Output Power for +3V & +5V)

max. Ausgangsleistung für +3V & +5V & +12V: 528W (550W)
(max. Output Power for +3V & +5V & +12V) 478W (500W)

max. Ausgangsleistung : 500W
(max. Output Power) 550W



Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50021238

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0001

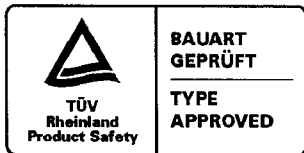
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|-------------------------------------|------------------------------------|--------------------------|----------------------------------|
| SAF02064 | ZTW1-WHL- 10003519 004 | 08.01.2003 | |

Genehmigungsinhaber *License Holder*
ICP Electronics Inc.
3F, No. 22, Chung-Hsing Rd.
Shi-Chi, Taipei Hsien 221
Taiwan, R.O.C.

Fertigungsstätte *Manufacturing Plant*
Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

| | | |
|--|--|---|
| Bezeichnung (Type Designation) | : ACE-850APXX (iEi) | 1 |
| X steht für (stands for) | : 0-9, A-Z oder freibleibend (or blank) | 1 |
| Nennspannung (Rated Voltage) | : AC 100-240V, 50-60Hz | |
| Nennstrom (Rated Current) | : 10A | |
| Schutzklasse (Protection Class) | : I | |
| max. Umgebungstemperatur (max. Ambient Temperature) | : 50°C (500W) 30°C (550W) | |
| Verschmutzungsgrad (Pollution Degree) | : 2 | |

Fortsetzung Blatt (continued on page) 02



2

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50021238

Blatt *Page*
0002

Ihr Zeichen *Client Reference*
SAF02064

Unser Zeichen *Our Reference*
ZTW1-WHL- 10003519 004

Ausstellungsdatum
08.01.2003

Date of Issue
(day/mo/yr)

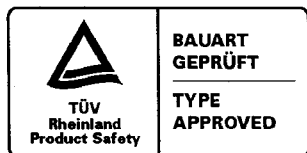
Genehmigungsinhaber *License Holder*
ICP Electronics Inc.
3F, No. 22, Chung-Hsing Rd.
Shi-Chi, Taipei Hsien 221
Taiwan, R.O.C.

Fertigungsstätte *Manufacturing Plant*
Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*

EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

wie Blatt (as page) 01
Fortsetzung (Continuation)

Ausgänge : DC +3.3V/27.0A, +5V/29.0A, +12V CPU/18A
(Outputs) +12.0V I/O/18.0A, +5Vsb/2.0A, -5V/0.3A,
-12V/0.8A

max. Ausgangsleistung für +3.3V & +5V : 150W
(max. Output Power for +3.3V & +5V)
max. Ausgangsleistung für +3.3V & +5V & +12V : 528W (550W)
(max. Output Power for +3.3V & +5V & +12V) 478W (500W)
max. Ausgangsleistung : 500W
(max. Output Power) 550W

Vermerke : Primär-und Sekundärkreise sind gemäß
Verfahren 1 und 2 nach Abschnitt 2.3 getrennt.
Der Einbau muß gemäß der zugehörigen Einbauanweisung
erfolgen. (Remarks : Primary and secondary circuits are
separated according to method 1 and 2 of clause 2.3.
The installation has to be carried out according to the
attached installation instruction.)



Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althofff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50021238

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0001

Ihr Zeichen *Client Reference*
SAF02064

Unser Zeichen *Our Reference*
ZTW1-WHL- 10003519 004

Ausstellungsdatum
08.01.2003

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*

ICP Electronics Inc.
3F, No. 22, Chung-Hsing Rd.
Shi-Chi, Taipei Hsien 221
Taiwan, R.O.C.

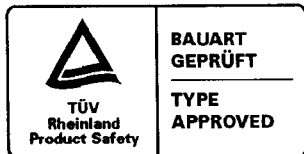
Fertigungsstätte *Manufacturing Plant*

Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*

EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

| | | |
|--|--|---|
| Bezeichnung (Type Designation) | : ACE-850APXX (iEi) | 1 |
| X steht für (stands for) | : 0-9, A-Z oder freibleibend (or blank) | 1 |
| Nennspannung (Rated Voltage) | : AC 100-240V, 50-60Hz | |
| Nennstrom (Rated Current) | : 10A | |
| Schutzklasse (Protection Class) | : I | |
| max. Umgebungstemperatur (max. Ambient Temperature) | : 50°C (500W) 30°C (550W) | |
| Verschmutzungsgrad (Pollution Degree) | : 2 | |

Fortsetzung Blatt (continued on page) 02



2

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product fulfills above-mentioned-requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Dipl.-Ing. A. Klinker

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50021238

Blatt *Page*
0002

Ihr Zeichen *Client Reference*
SAF02064

Unser Zeichen *Our Reference*
ZTW1-WHL- 10003519 004

Ausstellungsdatum
08.01.2003

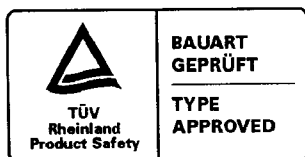
Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*
ICP Electronics Inc.
3F, No. 22, Chung-Hsing Rd.
Shi-Chi, Taipei Hsien 221
Taiwan, R.O.C.

Fertigungsstätte *Manufacturing Plant*
Hauptzertifikatsinhaber *Original license holder*
332245
FSP Group Inc.

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*
EN 60950:1992+A1+A2+A3+A4+A11



Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbau-Schaltnetzteil (Switching Power Supply)

wie Blatt (as page) 01
Fortsetzung (Continuation)

Ausgänge : DC +3.3V/27.0A, +5V/29.0A, +12V CPU/18A
(Outputs) +12.0V I/O/18.0A, +5Vsb/2.0A, -5V/0.3A,
-12V/0.8A

max. Ausgangsleistung für +3.3V & +5V : 150W
(max. Output Power for +3.3V & +5V)
max. Ausgangsleistung für +3.3V & +5V & +12V : 528W (550W)
(max. Output Power for +3.3V & +5V & +12V) 478W (500W)
max. Ausgangsleistung : 500W
(max. Output Power) 550W

Vermerke : Primär-und Sekundärkreise sind gemäß
Verfahren 1 und 2 nach Abschnitt 2.3 getrennt.
Der Einbau muß gemäß der zugehörigen Einbauanweisung
erfolgen. (Remarks : Primary and secondary circuits are
separated according to method 1 and 2 of clause 2.3.
The installation has to be carried out according to the
attached installation instruction.)

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above-mentioned requirements, the production is subject to surveillance.

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

Tel.:(+49/221)8 06 - 13 71 Fax:(+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com



Zertifizierungsstelle

Dipl.-Ing. A. Klinker



Underwriters Laboratories Inc.

2600 N.W. Lake Road
Camas, WA 98607-8542
(360) 817-5500
FAX No. (360) 817-6000

NOTICE OF AUTHORIZATION TO APPLY THE UL MARK

August 22, 2002

FSP Group Inc
22 Jianguo E Rd
Taoyuan City, Taiwan

Attention: Mr. Mike Lin

Reference: File E190414, Project 02CA05095

Subject: PC Power Supply, Models FSP550-60PLNXX and FSP550-60PLGXX

Dear Mr. Lin:

We have completed our engineering investigation under the above project number and find the component complies with the applicable requirements.

This letter temporarily supplements the UL Follow-Up Service Inspection Procedure and serves as authorization to apply the UL Recognized Component Mark and the UL Recognized Component for Canada to the above component.

Identical to Models FSP550-60PLNXX and FSP550-60PLGXX, which were submitted to UL for this investigation. The UL records covering the product will be in the Follow-Up Service Inspection Procedure, File E190414, Volume 1, Section 45.

To provide the manufacturer with the intended authorization to use the UL Mark, the addressee must send a copy of the Notice and all attached material to each manufacturing location.

This authorization is effective for 90 days only from the date of this Notice. Records covering the product are now being prepared and will be sent to you in the near future.

Products produced which bear the UL Mark shall be identical to those which were evaluated by UL and found to comply with the applicable requirements.

If changes in construction are discovered, authorization to use the UL Mark may be withdrawn and products that bear the UL Mark may have to be revised (in the field or at the manufacturer's facility) to bring them into compliance with the applicable requirements.

Follow-Up Service - The costs associated with Follow-Up Service to cover such things as the Annual Maintenance Fee, Inspection and Follow-Up Testing Fees (if applicable) are above and beyond the cost of this project. To learn more information associated with Follow-Up Service please visit our web site at www.ul.com/faq/followup.html.

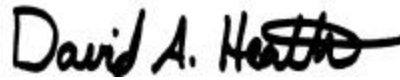
Should you have any questions or need further assistance, please do not hesitate to contact me.

Best regards



Kam Chan
Senior Project Engineer
Conformity Assessment Services
Tel: (360).817-5664
Fax: (360).817-6018

Reviewed by:



David Heath
Project Engineer
Conformity Assessment Services

*ADDS MODEL
 UNDERWRITERS LABORATORIES INC.
 MULTIPLE RECOGNITION CORRELATION SHEET

ML File No. E209781

Issued: 2001-01-11
 Revised: 2003-03-03

MULTIPLE RECOGNITION
 of

POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT INCLUDING
 ELECTRICAL BUSINESS EQUIPMENT-COMPONENT
 (QQGQ2/QQGQ8)

for

[833599001] ICP Electronics Inc.

Basically Recognized for

[488321001] FSP Group Inc.

Basically Recognized products covered by Procedure and/or Reports under
 File No. E190414, Vol. 1

| <u>Products Covered</u> | <u>Report Date</u> | <u>Basic Applicant's (Supplier's) Product Designation</u> | <u>Multiple Listee's Product Designation</u> |
|-------------------------|--------------------|---|--|
| | 9/5/00 | USR/CNR FSP300-60PFN | ACE-832AP |
| | 5/14/99 | USR/CNR FSP300-60BN (12v) | ACE-832A |
| | 9/5/00 | USR/CNR FSP300-60PFN | ACE-832AP-S |
| | 1/22/00 | USR/CNR FSP400-60GN | ACE-840A |
| | 9/5/00 | USR/CNR FSP400-60PFN | ACE-840AP |
| | 10/3/01 | USR/CNR FSP390-40AT | ACE-940AP |
| | 7/30/02 | USR/CNR FS0150-50PL1 | ACE-816AP |
| | 10/7/02 | USR/CNR FSP100-60DL (24V) | ACE-815C |
| | " | USR/CNR FSP150-60DL (48V) | ACE-815T |
| | 10/16/02 | USR/CNR FSP150-40AT | ACE916AP |
| | 6/4/02 | USR/CNR FSP550-60PLN | ACE-850AP |
| | 12/17/02 | USR/CNR FSP200-40AT | ACE-916A |

Marking: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, ML tradename, when applicable, and product designation.

IC: 750 Shenzhen, 749 Shanghai