

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**  
Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**  
Página / Page **1/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Fornecedor / Supplier  
100592254

**LENOVO TECNOLOGIA (BRASIL) LTDA**  
Estrada Municipal Jose Costa de Mesquita, 200  
Módulos 5 a 10, Chacara Alvorada, Indaiatuba – SP - CEP 13337-200, Brazil  
CNPJ - 07.275.920/0001-61

Produto Certificado / Certified Product

Computador pessoal / Personal computer

Família de Produto / Product's Family

Thinkcentre M900 Sff, Thinkcentre M900 Tiny, Thinkcentre M700 Sff, Thinkcentre M910q Tiny, Thinkcentre M710s, Thinkcentre M910s, Lenovo V520s-08ikl, Thinkcentre M710q, Thinkcentre M720s, Lenovo V530s-07icb, M920q Tiny ThinkCentre, M720q Tiny ThinkCentre, M920s SFF Thinkcentre

Modelo - Tipo / Model - Type

10FH\*\*\*\*\*; 10FL\*\*\*\*\*; 10GS\*\*\*\*\*; 10GT\*\*\*\*\*; 10KN\*\*\*\*\*; 10KQ\*\*\*\*\*; Lenovo S510 SFF  
Machine Type: 10KY, 10LO, 10LB, 10LC, 10LF, 10LG, 10MU\*\*\*\*\*; 10MV\*\*\*\*\*; 10MW\*\*\*\*\*;  
10MX\*\*\*\*\*; 10QN\*\*\*\*\*; 10M7\*\*\*\*\*; 10M8\*\*\*\*\*; 10QT\*\*\*\*\*;  
10MK\*\*\*\*\*; 10ML\*\*\*\*\*; 10QM\*\*\*\*\*; 10NM\*\*\*\*\*; 10NN\*\*\*\*\*; 10MQ\*\*\*\*\*; 10MR\*\*\*\*\*;  
10MS\*\*\*\*\*; 10MT\*\*\*\*\*; 10QR\*\*\*\*\*; 10ST\*\*\*\*\*; 10SU\*\*\*\*\*; 10SV\*\*\*\*\*; 10TR\*\*\*\*\*;  
10U6\*\*\*\*\*; 10TX\*\*\*\*\*; 10TY\*\*\*\*\*; 10XV\*\*\*\*\*; 10XW\*\*\*\*\*; 10RRXXXXX; 10RSXXXXX;  
10RTXXXXX; 10RUXXXXX; 10SYXXXXX; 10T1XXXXX; 10T2XXXXX; 10UHXXXXX;  
10V8XXXXX; 10T7XXXXX; 10T8XXXXX; 10T9XXXXX; 10TAXXXXX; 10TCXXXXX;  
10U8XXXXX; 10U9XXXXX; 10UAXXXXX; 10SJXXXXX; 10SKXXXXX; 10SLXXXXX;  
10TNXXXXX; 10U2XXXXX; 10U3XXXXX  
(Onde \* pode ser qualquer caractere alfanumérico ou vazio)

Marca Comercial / Trademark

LENOVO

Lote ou No. de Série / Lot or Serial Number

N/A

Normas Aplicáveis / Applicable standards

IEC 60950-1:2005 + A1:2009 + A2:2013; CISPR 22: 2012; CISPR 32: 2016; CISPR 24: 2015; IEC 61000-3-2:2014; IEC 61000-3-3:2013; IEC 61000-4-2: 2008; IEC 61000-4-3:2010; IEC 61000-4-4: 2012; IEC 61000-4-5: 2014; IEC 61000-4-6: 2013; IEC 61000-4-8: 2009; IEC 61000-4-11:2004

Programa de Certificação ou Portaria /  
Certification Program or Decree

PORTARIA NO. 170/2012 / DECREE NO. 170/2012  
PORTARIA NO. 407/2015 / DECREE NO. 407/2015  
PORTARIA NO. 48/2017 / DECREE NO. 48/2017

Relatório de Avaliação e Ensaios /  
Assessment and Test Report #

BR2334, Vol. 1, Sec. 45, 46, 50, 55, 58, 59, 60, 62, 75, 76, 78

Concessão Para / Concession for

Ostentar o Selo de Identificação da Conformidade do Sistema Brasileiro de Avaliação da Conformidade (SBAC) sobre o(s) produto(s) relacionado(s) neste certificado.  
*Bearing the Conformity Identification Seal of the Brazilian System of Evaluation of Conformity (SBAC) on the product covered by this certificate.*

Revisão / Revision date  
Validade / Expire date

17 de Abril de 2019 / April 17, 2019  
11 de Abril de 2022 / April 11, 2022

Delzuite M. Ferreira Jr.  
Gerente de Operações /  
Operations Manager

**UL do Brasil Certificações, organismo acreditado pela Coordenação Geral de Acreditação do INMETRO – CGCRE, segundo o registro Nº OCP-0029 confirma que o produto está em conformidade com a(s) Norma(s) e programas ou Portarias acima descritas.**  
*UL do Brasil Certificações, Certification body accredited by Coordenação Geral de Acreditação do INMETRO - CGCRE according to the register Nr OCP-0029 confirms that the product is in compliance with the standards and certification Programs or Decrees above mentioned.*



**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**  
Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

84-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

**Certificado No. / Certificate No.** UL-BR 19.0551  
**Data de Emissão / Date of issue** 12 de Abril de 2019 / April 12, 2019  
**Página / Page** 2/21

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

**Solicitante / Applicant** (100592254) **LENOVO TECNOLOGIA (BRASIL) LTDA**  
Estrada Municipal Jose Costa de Mesquita, 200  
Módulos 5 a 10, Chacara Alvorada, Indaiatuba – SP - CEP 13337-200, Brazil  
CNPJ - 07.275.920/0001-61

**Fábrica / Factory** (100592254) **LENOVO TECNOLOGIA (BRASIL) LTDA**  
Estrada Municipal Jose Costa de Mesquita, 200  
Módulos 5 a 10, Chacara Alvorada, Indaiatuba – SP - CEP 13337-200, Brazil  
CNPJ - 07.275.920/0001-61

**MARCAÇÃO / MARKING:** Marca do fabricante, modelo e características elétricas.

**CARACTERÍSTICAS NOMINAIS / RATINGS:**  
100-240 Vac, 3 A, 50/60 Hz, Class I  
3.25A or 4.5A 20Vdc, Class III

**LISTA DE ACESSÓRIOS / LIST OF ACCESSORIES:** N/A

**MODELO DE CERTIFICAÇÃO / CERTIFICATION MODEL:** 5

**VERSÃO DO PROJETO DO PRODUTO / PRODUCT DESIGN VERSION:** N/A

**LISTA DE COMPONENTES CRÍTICOS / LIST OF CRITICAL COMPONENTS:**

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
1. Label	Interchangeable	Interchangeable	Min 55 degree C, suitable for the surface applied.	UL969	UL
Cord set	Interchangeable	Interchangeable	----	NBR 14136, NBR NM 60884-1	INMETRO
2. Metal Chassis	-	-	Consists of 4 pieces, secured together by physical fit, wedged, overall 361.7 mm X 88.0 mm X 338.0 mm, min 0.6mm thick for top and bottom, min 0.8mm thick for sides,.  Overall 179mmx178.7mmx34.5mm, Min.0.6 mm thickness	-	-
Metal Chassis	Interchangeable	Interchangeable	min. 0.6 mm thickness	-	Test with equipment
Metal enclosure	Interchangeable	Interchangeable	Overall 257mm x 89mm x 340mm, min 0.6 mm thickness	IEC/EN 60950-1	Test with equipment
Plastic Front Panel and battery box plastic enclosure	LG CHEM LTD	HI121	HB, min. 1.5 mm thickness. Min. 95°C	UL94, IEC/EN 60950-1	UL & tested in Appliance
3. Plastic Front Panel	Interchangeable	Interchangeable	HB or better, min. 1.5 mm thickness. Min. 95°C	UL94, UL746C	UL
Plastic Front Panel	STYROLUTION GROUP GMBH	GP-22	HB, min. 0.8 mm thickness	Applicable parts of IEC/EN 60950-1	UL E108538 & tested in appliance
Plastic Front Panel	CHI MEI CORPORATION	PA-757(+)	HB, 80°C, min. 1.5mm thickness	UL746C, UL94	UL E56070

**Organismo de Certificação / Certification Body** **UL do Brasil Certificações**  
Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

81-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **3/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Plastic Front Panel (Alternative)	COVESTRO DEUTSCHLANDAG [PC RESINS]	2865 + (z), 2867 + (z)	V-2, 115°C, min. 1.5mm thickness.	UL 746C, UL 94	UL E41613a
Plastic Front Panel (Alternative)	SABIC INNOVATIVE PLASTICS B V	C6600(GG)(X) (VS)	V-2, 60°C, min. 1.0mm thickness.	UL 746C, UL 94	UL E45329
Plastic Front Panel (Alternative)	DONGGUAN HINGLONG PLASTIC TECHNOLOGY CO LTD	HL-ABSPCR35/ 65/85	HB, 60°C, min. 1.6mm thickness.	UL 746C, UL 94	UL E345434
Plastic Front Panel (Alternative)	Interchangeable	Interchangeable	HB or better, min. 1.5 mm thickness.	UL 746C, UL 94	UL certified
Plastic Front Panel (Dust Cover) (Optional)	Interchangeable	Interchangeable	HB or better, min. 0.80 mm thickness.	UL 746C, UL 94	UL certified
Plastic Stand (Optional)	Interchangeable	Interchangeable	HB or better, min. 0.80 mm thickness.	UL 746C, UL 94	UL certified
Plastic Front Panel and battery box plastic Enclosure (Alternative)	Interchangeable	Interchangeable	HB or better, min. 1.5 mm thickness. Min. 95°C	UL94:2013	UL approved
4. PWB	Interchangeable	Interchangeable	Min V-1, min 105 degree C	UL796	UL
5. Built-in Power Supply	FSP Group Inc.	FSP180- 20TGBAA	I/P: 100-240Vac, 3.0A, 50/60Hz; O/P: +12V/15.0A, -12V/0.2 A, 180W	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. JPTUV- 062658
5a. Built-in Power Supply (alternate)	Shenzhen Huntkey Electric Co., Ltd.	HK280-72PP, HK280-72PP xy (x=A-Z or blank, y=0-9 or blank)	I/P: 100-240Vac, 3.0A, 50/60Hz; O/P: +12V/15A, -12V/0.2 A, max. 180W; +12V: max. 180W; -12V: max. 2.4W.	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. SG-OF- 12495
5b. Built-in Power Supply (alternate)	FSP Group Inc.	FSP210- 20TGBAA FSP180- 20TGBAB FSP210- 20TGBAB	I/P: 100-240Vac, 3.0A, 50/60Hz; O/P: +12V/17.5A, -12V/0.2 A, 210W Altitude: up to 5000m	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. JPTUV - 062658 No.: JPTUV 067200 M1
5c. Built-in Power Supply (alternate)	Acbel Polytech Inc.	PCE025	I/P: 100- 240Vac, 3.0A, 50/60Hz; O/P: +12V/17.5A, -12V/0.2 A; Total power 210W max.	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. JPTUV- 062130
5d. Built-in Power Supply (alternate)	Shenzhen Huntkey Electric Co., Ltd.	HK310-71PP, HK310-71PP xy (x=A-Z or blank, y=0-9 or blank)	I/P: 100-240Vac, 3.0A, 50/60Hz; O/P: +12V/17.5A, -12V/0.2 A; Max 210W; +12V: max. 210W; - 12V: Max. 2.4W	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. SG-OF- 12494
5e. Built-in Power Supply (alternate)	Lite-On Technology Corporation	PA-2221-3XX (X can be any character or blank)	I/P: 100-240Vac, 3A, 50/60Hz; O/P: +12V/17.5A, -12V/0.2 A, continuous total DC output power 210W max.	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. JPTUV- 062750
Built-in Power Supply	Lite-On Technology Corporation	PA-1650-72	Input: AC 100-240V;50-60Hz;1.8A; Class I Output: DC 20V;3.25A	IEC/EN 60950-1	CB Cert. No.: JPTUV-044694 GS Cert. No.: S 50233068 0001

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **4/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Built-in Power Supply	Lite-On Technology Corporation	PA-1900-72	Input: AC 100-240V;50-60Hz;1.5A; Class I Output: DC 20V;4.5A	IEC/EN 60950-1	TUV CB Cert. No. JPTUV- 044681 GS Cert. No.: S 50232721 0001
Built-in Power Supply	DELTA ELECTRONICS INC	ADP-90XD B ADP-65FD B	Input: AC 100-240V;50-60Hz;1.5A; Class I Output: DC 20V;4.5A Input: AC 100-240V, 1.5A, 50- 60Hz; Output: DC 20V, 3.25A; Altitude: up to 5000m	IEC/EN 60950-1	UL CB Cert. No. DK-27369-A1- UL GS Cert. DK-39157- UL, No.: S1 50234916 UL E131881
6. DC Fan (For CPU)	DELTA ELECTRONICS INC	AFB0812SH- 9N07	12Vdc, 0.51A, 64.5CFM	UL507, IEC60950-1	VDE
DC Fan (For CPU)	SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO LTD	EF90151BXC01C- S9A	DC 12V, 0.771A, 19.0CFM	UL 507, IEC/EM 60950-1	UL E77551 TUV R 50275749
6a. DC Fan (For CPU) (alternate)	Foxconn Technology Co., Ltd.	PVA080G12Q -P01-AD	12Vdc, 0.65A, 66.09CFM	UL507, IEC60950-1	TUV
6b. DC Fan (For CPU) (alternate)	ASIA VITAL COMPONENTS CO LTD	DS08025T12 UP199DS08025R12 UP227 DS08025R12UP241 DS08025R12UP242	12Vdc, 0.7A, 64.44CFM	UL507, IEC60950-1	TUV UL E158191 & tested in appliance
6c. DC Fan (For CPU) (alternate)	SHENZHEN DONGWEIFENG ELECTRONIC TECHNOLOGY CO LTD	EF(X)-08E12(Y)(Z), where (X) may be S, H, B, C or F, (Y) may be W, (Z) may be blank, may be – WWWW, W can be 0 to 9 or A to Z  EFH 08E12WGP01	12Vdc, 0.7A, 64.9CFM	UL507, IEC60950-1	TUV
6d. DC Fan (For CPU) (alternate)	Interchangeable	Interchangeable	12Vdc, 0.7A max., 64.44CFM min. 12Vdc, max 1.0A, min. 18CFM 12Vdc, 0.7A, 64.4CFM	UL507, IEC60950-1 UL 507:1999& IEC 60950-1: 2005+A1:2009 EN 60950 1:2006+A11:2009+ A1:2010+A12:2011	TUV UL, S & other EU certification Marks
DC Fan (For CPU) (Alternative)	ASIA VITAL COMPONENTS CO LTD	BAZA0814B2U P001	12Vdc, 1.0A, 18CFM	UL 507 IEC/EN 60950-1	UL E231557 & tested in appliance
7. DC Fan (For System)	Foxconn Technology Co., Ltd.	PVA080G12Q -(X)YY-YY, Where (X) may be F, R or X, X may be from 0 to 9, from A to Z or blank; Y may be from 0 to 9, from A to Z or blank	12Vdc, 0.65A, 65CFM	UL507, IEC60950-1	TUV

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0



# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

**Certificado No. / Certificate No.** UL-BR 19.0551  
**Data de Emissão / Date of issue** 12 de Abril de 2019 / April 12, 2019  
**Página / Page** 5/21

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
7a. DC Fan (For System) (alternate)	DELTA ELECTRONICS INC	AFB0812SHAA38	12Vdc, 0.6A, 64CFM	UL507, IEC60950-1	TUV
7b. DC Fan (For System) (alternate)	Interchangeable	Interchangeable	12Vdc, 0.65A max., 64CFMmin. 12V dc, 0.60A, 64.5CFM	UL507, IEC60950-1	TUV UL, EU Certification Approved
8. DC Fan (For HDD) (Optional)	Asia Vital Components Co., Ltd.	DS04010R12 (W)(V), where (Z) may be A, B, C, G, S, T, R or P, (W) may be S, U, H, M or L, (V) may be XXXX, where X maybe A through Z, 0 through 9, "-" or blank.	12Vdc, 0.14A, 7.59 CFM	UL507, IEC60950-1	TUV UL E158191 & tested in appliance
8a. DC Fan (For HDD) (Optional) (alternate)	Interchangeable	Interchangeable	12Vdc, 0.14A max., 7.59 CFM min.	UL507, IEC60950-1	TUV UL, EU Certification Approved
DC Fan (For CPU)	DELTA ELECTRONICS INC	BFB0712HBA9 H	12Vdc, 1.0A, 18.5CFM	UL 507 IEC/EN 60950-1	UL E132003 & tested in appliance
DC Fan (For CPU)	AVC	Z8UA0D4001-1 (DS08025R12U P227)	DC 12V, 0.7A, 64.4CFM	UL507	UL E158191
DC Fan (For System Rear) (optional)	AVC	DS08025R12UP241 -1	DC 12V, 0.45A/0.7A max., 64.4CFM min.	UL507	UL E158191
DC Fan (For System Front) (optional)	AVC	DS08025R12UP242 -1	DC 12V, 0.7A max., 64.4CFM min.	UL507	UL E158191
9. Lithium Battery Protection Circuit (for Motherboard, P/N: IQ1X0MS)	-	-	Reverse current protection accomplished by Diode (D2) and 1 kohm resistor (R195).	-	-
10. Optical Device Drive (Optional)	Samsung Electronics Co., Ltd.	TS-H353C	Class 1(I), 5V/12 V dc, 1.5 A or 1.6 A/1.5A or 1.6 A	UL60950-1	UL
Optical Device Drive (Optional)	Philips & Lite- On Digital Solutions Corp	DS-8A8SH	Class 1 laser, 5/12 V dc, 3.0A/1.5 A.	IEC/EN 60825-1& IEC 60950-1	TUV CB Cert. No. JPTUV- 052989
10a. Optical Device Drive (Optional) (alternate)	Interchangeable	Interchangeable	Class 1(I), 5/12 V dc, 3.0/3.0 A max.	UL60950-1; IEC/EN 60950-1	TUV, VDE, Nemko S, CB, UL& other EU certificationmarks
Optical Device Drive (Optional)	Hitachi-LG Data Storage inc.,	CH20N	BD Combo, Class 1 laser, 5/12 V dc, 1.5/1.5 A.	IEC/EN 60825-1	Intertek S Certificate: 911330
Optical Device Drive (Optional)	Sony Optiarc Inc.	DDU1681Sxxx (x can be any alphanumeric or blank or hyphen)	Class 1 laser, DC 5/12 V, 1.5/1.5 A	IEC/EN 608251:2014& IEC 60950-1	CB Certificate: JPTUV 026113

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**  
 Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
 São Paulo – SP – Brasil - 04571-010  
 T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **6/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Optical Device Drive (Optional) (Alternative)	Interchangeable	Interchangeable	Class 1 laser, DC 5/12 V, 3.0/3.0 A max. Class III	UL60950-1, IEC/EN 60950-1, IEC/EN 60825-1	UL, S & other EU certification marks
11. Hard Disk (Optional)	Seagate Technology Inc.	ST1000DM003	12 V/5 V dc, 1.5A max	UL60950-1	UL
Hard Disk Drive (Optional)	Western Digital Technologie Inc	WD5000AAKX	5 V/12 V dc, 1.0A/0.95 A max.	Applicable parts of IEC/EN 60950-1	UL E101559 & tested in appliance
Hard Disk (Optional)	Seagate Technology, Incorporated	ST3 series	5 V/12 V dc, 0.72 A/0.52 A max. DC 5 V/12 V, 1.5 A/ 1.5 A max.	UL 60950-1 & IEC/EN 60950-1	UL E106814 & tested in appliance
Hard Disk (Optional)	Seagate Technology, Incorporated	ST500DM002	12 V/5 V dc, 1.5A max	UL60950-1	--
Hard Disk (Optional)	Seagate Technology, Incorporated	ST3500413AS	12 V/5 V dc, 1.5A max	UL60950-1	--
11a. Hard Disk(Optional) (alternate)	Interchangeable	Interchangeable	5 V/12 V dc, 3.0 A/3.0 A max.	UL60950-1; IEC/EN 60950-1 IEC 60950-1: 2005+A1:2009 EN 60950-1: 2006+A11:2009+A1 :2010+A12:2011	TUV, VDE, Nemko S & other EU certification marks
12. Lithium Battery for RTC	Sony Energy Devices Corp.	CR2032	3 VDC, maximum abnormal charging current 10 mA (Lithium Type)	UL1642	UL MH20550 & tested in appliance
	VIC-DAWN ENTERPRISE CO LTD		3.0V/220mAh max continue discharge current: 4mA		
Lithium Battery for RTC (Alternative)	PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA	CR2032	3V/225mAh max continue discharge current: 0.2mA	Applicable parts of IEC/EN 60950-1	UL MH12210 & tested in appliance
Lithium Battery for RTC (Alternative)	VIC-DAWN ENTERPRISE CO LTD	CR2032	DC 3 V, Max. abnormal charging current 10 mA	UL 1642 IEC/EN 60950- 1	UL MH20550 & tested with equipment
Lithium Battery for RTC (Alternative)	Shun Wo New Power Battery Technology Ltd.	CR2032	DC 3 V, Max. abnormal charging current 10 mA	UL 1642	--
Lithium Battery for RTC (Alternative)	Hitachi Maxell Ltd	CR2032	DC 3 V, Max. abnormal charging current 10 mA	UL 1642	--
Lithium Battery for RTC (Alternative)	Toshiba Home Appliances Corp	CR2032	DC 3 V, Max. abnormal charging current 10 mA	UL 1642	--
Lithium Battery for RTC (Alternative)	Wuhan Lixing (Torch) Power Source Co Ltd	CR2032	DC 3 V, Max. abnormal charging current 10 mA	UL 1642	--
Lithium Battery for RTC (Alternative)	Jhih Hong Technology Co Ltd	CR2032	DC 3 V, Max. abnormal charging current 10 mA	UL 1642	--

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

84-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

**Certificado No. / Certificate No.**    **UL-BR 19.0551**  
**Data de Emissão / Date of issue**    **12 de Abril de 2019 / April 12, 2019**  
**Página / Page**    **7/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
12a. Lithium Battery for RTC (alternate)	Interchangeable	Interchangeable	3 V dc, maximum abnormal charging current 10 mA (Lithium Type)	UL1642	UL
13. Poly Switch (F3,F4,F6,F7,F8, F12)	BOURNS ELECTRONICS (TAIWAN) LTD	MF-USMF110 MF-NSMF200 MF-MSMF260 MF-PSML260	PTC, rated 6Vdc, holding current: 1.1 A, trip current: 2.2A 6Vdc, holding current: 2.6A, trip current: 5.2A PTC, rated 6V dc, holding current: 2.6 A, trip current: 5.0 A	UL1434	UL UL E174545 & tested in appliance
13a. Poly Switch (F3,F4,F6,F7,F8, F12) (alternate)	TYCO ELECTRONICS CORP	microSMD110 F-2	PTC, rated 6V dc, holding current: 1.1 A, trip current: 2.2 A	UL1434	UL E74889 & tested in appliance
Poly Switch (F1,SF2,SF8)	TYCO ELECTRONICS CORP	nanoSMDC110 F	PTC, 6V dc, 1.1A, tripping current: 2.2A	UL 1434 & IEC/EN 60950-1	UL E74889 & tested in appliance
13b. Poly Switch (F3,F4,F6,F7,F8, F12) (alternate)	POLYTRONICS TECHNOLOGY CORP	SMD1210P11 0TFT SMD1812P260T SPR-P260T SMD1206P110TFT	PTC, rated 8V dc, holding current: 1.1 A, trip current: 2.2 A 8Vdc, holding current: 2.6A, trip current: 5A PTC, rated 6Vdc, holding current: 2.6A, trip current: 5.2A DC 6V, holding current: 1.1A, trip current: 2.2A	UL1434	UL E201431 & tested in appliance
14. Poly Switch (F1, F2, F5, SF2,SF8, SF3,SF5)	BOURNS ELECTRONICS (TAIWAN) LTD	MF-NSML300 MF-NSMF110 MF-NSMF110-2	PTC, 6 V dc, holding current: 3A, tripping current: 6A PTC, 6V dc, 1.1A, tripping current: 1.8A DC 6V, holding current: 1.1A, trip current: 2.2A	UL1434 & IEC/EN 60950-1	UL E174545 & tested in appliance
Poly Switch F1,F2,F3 (Alternative)	LITTELFUSE	1206L110THYR	DC 8V, holding current: 1.1A, trip current: 2.2A	UL1434	UL E183209
14a. Poly Switch (F1,F5, F7,SF2,SF8) (alternate)	LITTLEFUSE INC.	1206L300SL WR 1206L110 1812L260TH 0805L260ULTHYR 1206L200, 1206L200PR	PTC, 6 V dc, holding current: 3 A, tripping current: 6 A PTC, 6V dc, 1.1A, tripping current: 2.2A 8VDC, holding current 2.6A, trip current 5A	UL1434 & IEC/EN 60950-1	UL E183209 & tested in appliance
Poly Switch (F4, F5, F8) (alternate)	LITTELFUSE INC	1210L110THYR	PTC, rated 8V dc, holding current: 1.1 A, trip current: 2.2 A	UL1434	UL
Poly Switch F7 (Alternative)	LITTELFUSE	MF-MSMF260-2	DC 6V, holding current: 2.6A, trip current: 5.2A	UL1434	UL E174545
Poly Switch (U36 U37 U69 U71 for USB) (Alternative)	ANPEC	APL3518ABITRG	DC 5.5V, Holding Current : 2A, trip - Current: 3.6A	UL Subject 2367	UL E328191
15. IC Switch (U36, U37, U51, U52, U57, U59, U69, U71, U88)	UPI SEMICONDUCTOR CORP	UP7549TMA5 -25	2.7 to 5.5Vdc, Cont. current: 2A; 6 Vdc, holding current: 2A trip current: 3.1-5A	UL1434	UL E316940 & tested in appliance
15a. IC Switch (U51, U52, U57, U59) (alternate)	NIKO SEMICONDUCTOR CO LTD	GS7612S5MN GS7612S5MNR	2.0-5.5Vdc, Cont. current: 2A; Prot. current: 5A 5.5 Vdc, holding current : 3.2A, trip current: 5.0A	UL2367	UL E360303 & tested in appliance
IC Switch (U3 on optional USB type C module)	Global Mixedmode Technology Inc	G517AL	2.7-5.5Vdc, Cont. Current: 0.1A-2.15A; Prot. current: 0.2A-2.75A	IEC/EN 60950-1	TUV CB Cert. No. JPTUV-071444
16. Heat sink (above CPU)	-	-	Consist of Aluminum part, overall	-	-

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**  
 Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
 São Paulo – SP – Brasil - 04571-010  
 T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**  
 Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**  
 Página / Page **8/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
17. Heat sink (above South Bridge chipset)	-	-	Consist of Aluminum part, overall	-	-
18. Insulating tubing/Sleeving	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1 or FT-1; 105 degree C, 300 V.	UL224	UL
19. Wiring, Internal secondary ELV/SELV Circuits	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1 or FT-1; min 30 V, 60 or 80 degree C.	UL758	UL
20. Interconnectin g Cable (Optional)	Interchangeable	Interchangeable	60 degree C min., 60 V min., 3.05 m long max, VW-1 or FT-1	UL758	UL
21. Internal Plastic Part Materials	Interchangeable	Interchangeable	V-2 min.	UL94, UL746C	UL
22. Connectors And Receptacles (Secondary ELV/SELV circuits)	Interchangeable	Interchangeable	Copper alloy pins housed in bodies of plastic rated V-2 min.	UL94, UL746C	UL
22a. Connectors And Receptacles (Secondary ELV/SELV circuits) (alternate)	Interchangeable	Interchangeable	plastic rated V-2 min.	UL498,UL1977	UL
23. Power Supply Cord	Interchangeable	Interchangeable	----	NBR 14136, NBR NM 60884-1	INMETRO
Power Supply Cord (Optional)	Interchangeable	Interchangeable	Type SVT or SPT-2, minimum 18 AWG, min 250 V, 6 A. One end with NEMA 5-15P. Other end in appliance coupler	UL62+ UL498, UL817,IEC607 99	--
24. Graphics card	Shenzhen Bitland Information Technology Co., Ltd.	BD3E56 BD3F09 BD3G10 (P/N: GT 730) BD3E32(Marketing Name: GTX 750Ti ) BD3F86 (P/N: GT 730)	DC 12V, 5.5Amax; and DC 3.3V, 3A max; Class III DC 12V; 3.3V; Class III DC 3.3V,3A; 12V,5.5A max(optional); Class III	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. JPTUV- 059969 and JPTUV-063517- M1 JPTUV-076247
24a. Graphics card (Alternate)	Micro-Star Int'l Co., Ltd.	V313 V338 (P/N: GT 730)	DC 3.3V; 12V(optional); Class III	UL 60950-1, IEC/EN 60950-1	TUV CB Cert. No. JPTUV- 059127 TUV CB Cert. No.JPTUV- 068607
24b. Graphics card (Alternate)	Interchangeable	Interchangeable	DC 3.3V; 12V(optional); Class III DC 12V, 5.5A max. or DC 3.3V, 3A max., Class III, 41W	UL 60950-1, IEC/EN 60950-1	TUV, VDE, Nemko UL, EU Certification Approved
24c. Graphics Card	NVIDIA CORP	P2012 (P/N: K420)	PCI-E interface, DVI and DISPLAY output ports.	-	-
Graphics Card	NVIDIA CORP	Quadro420	DC 12V, 5.5A max. or DC 3.3V, 3A max., Class III, 41W	IEC/EN 60950-1	Tested in appliance
24c-1. PWB	Interchangeable	Interchangeable	V-1 or better, min. 105 degree C	UL796	UL
24c-2. DC Fan	Interchangeable	Interchangeable	min. 3.03 CFM	UL507, IEC60335, , IEC60950-1	UL, TUV

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**  
 Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
 São Paulo – SP – Brasil - 04571-010  
 T: 55.11.3049.8300 / W: brazil.ul.com

84-IC-F0033 rev 10.0



# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **9/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
24c-3. IC switch (U506) for DISPLAY	ANPEC ELECTRONICS CORP	APL3516AKITRG	Rated 2.9 to 3.7 V dc, holding current: 0.9A, tripping current:1.7A	UL2367	UL
25. Plastic Base	Interchangeable	Interchangeable	min. HB	UL94, UL746C	UL
USB Power Switch SF3,SF5) (Alternate)	POLYTRONICS TECHNOLOGY CORP	SMD1206P300 SLR(\$)	PTC, 6 V dc, 3A, tripping current:6A	UL 2367& IEC/EN 60950-1	UL E201431 & tested in appliance
USB Power Switch SU1,SU34)	Nuvoton Technology Corp	NCT3955Y	Input Voltage Range, V dc 4.5 V - 5.5 V Continuous Output Rating, A per output 2.5 A Protective Current Rating, A +3.5 A	IEC/EN 60950-1	TUV CB Cert SG-OF-12624
USB Power Switch (SU1,SU34) (Alternate)	PERICOM TECHNOLOGY (SHANGHAI)CO LTD	PI5USB2546ZH E	Input Voltage: 4.5 - 5.5 Vdc; Continuous Rating: 30 mA to 2.5 A Current Limit:100 mA to 3.18 A	IEC/EN 60950-1	UL CB Cert. No.US-24707-UL
USB power switch (SU69)	TEXAS INSTRUMENTS INC  Interchangeable	TPS2546  Interchangeable	Rated: DC 4.5- 5.5V, holding current: 2.5A, trip current: 3.1A	UL 1434 & IEC/EN 60950-1	UL E169910 & tested with equipment
PCB for motherboard	GOLDEN ELITE TECHNOLOGY (SHEN ZHEN) LTD	GE-1	V-0, min. 1.5mm, 130 °C	UL796 & IEC/EN 60950-1	UL E307069 & tested in appliance
PCB for motherboard (Alternative)	Interchangeable	Interchangeable	V-1 or better, min. 1.5mm, min. 105 °C	UL796 :2010	UL approved
PCB for battery box	TRUSTECH ELECTRONICS (SHENZHEN) CO LTD	CL-2	V-0, min. 1.5mm, 130 °C	UL796, IEC/EN 60950-1	UL E241819 & tested in appliance
PCB for battery box (Alternative)	Interchangeable	Interchangeable	V-1 or better, min. 1.5mm, min. 130 °C/ 105° C	UL796:2010	UL approved
PCB	CHUAN YICOMPUTER (SHENZHEN) CO LTD	CM-4	V-0, min. 1.5mm, 130 °C	Applicable parts of IEC/EN 60950-1	UL E162264 & tested in appliance
PCB	HANNSTAR BOARD CORP	MV-4	V-0, min. 1.5mm, max. 130°C	UL 94, UL 796	UL E89382
PCB (Alternative)	PALWONN ELECTRONICS (SHENZHEN) CO LTD	M3	V-0, min. 1.5mm, 130 °C	Applicable parts of IEC/EN 60950-1	UL E230435 & tested in appliance
PCB (Alternative)	HANNSTAR BOARD CORP	MV-1	V-0, min. 1.5mm, 130 °C	UL 796	UL E89382
Li-ion Battery Pack (Optional)	SONY TAIWAN LTD	45N1040	10.8 Vdc, 2.9 Ah / 32 Wh	IEC/EN 60950-1	UL CB report.No. E236872- A131- CB-2
Rubber	Interchangeable	Interchangeable	Min V-1, Min 1.0mm thick, filled in the metal enclosure bottom openings as part of fire enclosure.	UL94, UL746C	UL

Seção 75:

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
01. Cord set (Optional)	Interchangable	Interchangable	---	NBR 14136, NBR NM 60884-1	INMETRO

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

**Certificado No. / Certificate No.**    **UL-BR 19.0551**  
**Data de Emissão / Date of issue**    **12 de Abril de 2019 / April 12, 2019**  
**Página / Page**    **10/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
02. Interconnecting Cable (optional)	Interchangeable	Interchangeable	Max. 3.05m long, rated VW-1 or FT-1 or better.	UL758, UL1675, UL444	UL, --
02a. Interconnecting Cable (optional) - alternate	Interchangeable	Interchangeable	Maximum 3.05m long, type CMP, CMR, CMG, CM.	UL444	--, UL
02b. Interconnecting Cable (optional) - alternate	Interchangeable	Interchangeable	With RJ-45 type connector.	UL1863	--, UL
03. Label	Interchangeable	Interchangeable	Min. 60 degree C, suitable for the surface supplied.	UL969	UL, --
03a. Label - alternate	Interchangeable	Interchangeable	Molded as part of enclosure, Hot stamping, laser etching or silk screened.	--	--, --
04. Wiring, Internal (Secondary SELV circuits)	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1 or FT-1; 80 degree C, Min. 30Vdc.	UL758	UL, --
05. Connectors and Receptacles (Secondary ELV/SELV circuits)	Interchangeable	Interchangeable	Metal/ Coper alloy pins housed in bodies of plastic rated Min. V-2.	UL94	UL, --
05a. Connectors and Receptacles (Secondary ELV/SELV circuits) - alternate	Interchangeable	Interchangeable	--	UL1977, UL498	UL, --
05b. Connectors and Receptacles (Secondary ELV/SELV circuits) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are mounted on V-1 class material.	--	--, --
05c. Connectors and Receptacles (Secondary ELV/SELV circuits) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are separated from electrical parts (other than insulated wires and cables) by at least 13mm of air or by a solid barrier of V-1 class material.	--	--, --
06. Internal Plastic Parts Materials	Interchangeable	Interchangeable	Min. V-2, or Min. HF-2.	UL94	UL, --
06a. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	Min. HB or HBF, when foamed plastic parts are separated from electrical parts (other than insulated wires and cables) by at least 13mm of air or by a solid barrier of V-1 class material.	UL94	UL, --
06b. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	The combination, when one or more layers of thin insulating material used on the surface application, comply with V-2 class material within the fire enclosure.	--	--, --
06c. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are mounted on V-1 class material.	--	--, --
06d. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are separated from electrical parts (other than insulated wires and cables) by at least 13mm of air or by a solid barrier of V-1 class material.	--	--, --
07. Insulating Tubing/ Sleeveing	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1 or FT-1.	UL224	UL, --
08. Printed Wiring Board (PWB)	Interchangeable	Interchangeable	Min. V-1, Min. 105 degree C.	UL796	UL, --
09. Enclosure	--	--	Metal, Min. 0.6mm thick. See enclosure 4-01 for detail.	--	--, --

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**  
 Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
 São Paulo – SP – Brasil - 04571-010  
 T: 55.11.3049.8300 / W: brazil.ul.com

84-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **11/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
09-01. Enclosure (Front Bezel & Rear side)	Interchangeable	Interchangeable	HB or better.	UL94	UL, --
10. Foot Rubber (filled in metal enclosure)	Interchangeable	Interchangeable	V-1 or better, min. 1.0mm thickness, filled in the metal enclosure bottom openings as part of fire enclosure.	UL94, UL746C	UL, --
11. Power supply (for unit with rating 3.25A)	DELTA ELECTRONICS INC	ADP-65FD B	Input: 100-240Vac, 1.5A, 50-60Hz; Output: 20Vdc, 3.25A; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E131881), CB by UL (DK-39157-UL)
11a. Power supply (for unit with rating 3.25A) - alternate	LITE-ON TECHNOLOGY CORP	PA-1650-72	AC Input: 100-240Vac, 50-60Hz, 1.8A; DC Output: 20Vdc/ 3.25A; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E132068), CB by TUV RH (JPTUV-057469)
11b. Power supply (for unit with rating 3.25A) - alternate	CHICONY POWER TECHNOLOGY CO LTD	A17-065N2A	Input: 1.8A 100-240V~ 50-60Hz; Output: 3.25A, 20V; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E143709), CB by Nemko (NO99354)
11c. Power supply (for unit with rating 3.25A) - alternate	Interchangeable	Interchangeable	Output: 20Vdc, min. 3.25A; 35 degree C min., Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL, CB
11d. Power supply (for unit with rating 3.25A or 4.5A) - alternate	DELTA ELECTRONICS INC	ADP-90XD B	Input: AC 100-240V, 1.5A, 50-60Hz; Output: 20Vdc/4.5A; 40 degree C, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E131881), CB by UL (DK-39163-UL)
11e. Power supply (for unit with rating 3.25A or 4.5A) - alternate	LITE-ON TECHNOLOGY CORP	PA-1900-72	I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 20Vdc, 4.5A; 40 degree C, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E132068), CB by TUV RH (JPTUV-044681-M2)
11f. Power supply (for unit with rating 3.25A or 4.5A) - alternate	Interchangeable	Interchangeable	Output: 20Vdc, min. 4.5A; 35 degree C min., Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL, CB
11g. Power supply - alternate	DELTA ELECTRONICS INC	ADL135NDC3A	Input: 100-240V~, 1.5A, 50-60Hz; Output: 20Vdc, 6.75A; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC62368-1	UL (E131881), CB by UL (DK-63818-UL)
11h. Power supply - alternate	LITE-ON TECHNOLOGY CORP	ADL135NLC3A	Input: 100-240Vac, 50-60Hz, 2.5A; Output: 20Vdc, 6.75A; 40 degree C, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E132068), CB by TUV RH (JPTUV-062043)
11i. Power supply - alternate	Interchangeable	Interchangeable	Output: 20Vdc, min. 6.75A; 35 degree C min., Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL, CB
12. Hard Disk (optional)	SEAGATE TECHNOLOGY L L C	ST3	12Vdc, 1.5A maximum, 5Vdc, 1.5A maximum.	UL60950-1, IEC60950-1	UL (E106814), --
12a. Hard Disk (optional) - alternate	Interchangeable	Interchangeable	5/12 V dc, 3.0/3.0A max.	UL60950-1, IEC60950-1	UL, --
13. Optical Disk Drive (optional)	LG ELECTRONICS INC	GUAX#, GUCx#, GUEX# DUCx#, DUEX#	DC 5V, 1.5A, Class III, CLASS 1 LASER PRODUCT.	UL60950-1	UL (E119002), --
13a. Optical Device Drive (optional) - alternate	Interchangeable	Interchangeable	Class 1 laser, 5/12Vdc, 3.0/3.0A max. Class III.	UL60950-1	UL, --
14. CPU Fan	FOXCONN TECHNOLOGY CO LTD	PVB070E12H-P01	12V, 0.95A, 17.5CFM.	UL507	UL (E231557), --
14-01. Heat sink for CPU fan	--	--	Consist of Aluminum part, overall see enclosure 4-04 for details.	--	--, --
14a. CPU Fan - alternate	ASIA VITAL COMPONENTS CO LTD	BAZA0817R2UP003	12V, 0.80A, 20.3CFM.	UL507	UL (E158191), --
14a-01. Heat sink for CPU fan	--	--	Consist of Aluminum part, overall see enclosure 4-02 for details.	--	--, --
14b. CPU Fan - alternate	DELTA ELECTRONICS INC	BUC0812VD-02	12V, 1.60A, 20.25CFM.	UL507, IEC60950-1	UL (E132003), TUV RH
14b-01. Heat sink for CPU fan	--	--	Consist of Aluminum part, overall see enclosure 4-03 for details.	--	--, --

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **12/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
14c. CPU Fan - alternate	Interchangeable	Interchangeable	Max. 12Vdc, 1.60A max., min. 17.5CFM.	UL507	UL, --
15. Mother Board	Interchangeable	IQ3X0IL	--	--	--, --
15-01. RTC Battery	PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA	CR2032*	3Vdc, maximum abnormal charging current 10mA, user replaceable against charging current by multiple components PD203 and PR224 rated 1Kohm.	UL1642	UL (MH12210), --
15-01a. RTC Battery - alternate	VIC-DAWN ENTERPRISE CO LTD	CR2032	3Vdc, maximum abnormal charging current 10mA, user replaceable against charging current by multiple components PD203 and PR224 rated 1Kohm.	UL1642	UL (MH20550), --
15-02. Polyswitch (F2, F10)	BOURNS ELECTRONICS (TAIWAN) LTD	MF-USMF110	6Vdc, Ih=1.1A, It=2.2A, CA=1 (max. 110), 2, 3, 4. Tmoa=85 degree, C2.	UL1434, UL60730-1	UL (E174545), --
15-02a. Polyswitch (F2, F10) - alternate	LITTELFUSE INC	MICROSMD110F-2	6Vdc, Ih=1.1A, It=2.2A, CA=1 (max. 125), 2, 3, 4. Tmoa=85 degree, C1.	UL1434, UL60730-1	UL (E74889), --
15-03. USB Polyswitch (U27, U28, U29, U30)	UPI SEMICONDUCTOR CORP	Series uP7549, following by P, Q, R, S, T or U, then following by S8, SA8, M5, MA5, MC5, RA8 or RU8, then following by 25	2.7 to 5.5VDC, Cont.current:2.0A, Prot.current:5.0A, Temp range:-30 degree C to 70 degree C, TNC:1.	UL2367	UL (E316940), --
15-03a. USB Polyswitch (U27, U28, U29, U30) - alternate	POLYTRONICS TECHNOLOGY CORP	AX87, followed by 13, 23, followed by S, B, U8, may be followed by A	2.5 to 5.5VDC, Cont.current:2.0A, Prot.current:3.8A, Temp range:-30 degree C to 70 degree C.	UL2367	UL (E353665), --
15-04. USB Polyswitch (U59)	TEXAS INSTRUMENTS INC	SN1702001, may be followed by additional suffixes.	Range: 4.5V-5.5V, Cont.current:2.5A, Prot.current:3.1A, Temp Range:-40 to 85 degree C, TNC 1.	UL2367	UL (E169910), --
15-04a. USB Polyswitch (U59) - alternate	ANPEC ELECTRONICSCORP	APL3524QBI-TRG	Range: 4.5V-5.5V, Cont.current:0.15-2.5A, Prot.current:0.275-3.17A, Temp Range:-30 to 70 degree C, TNC 1.	UL2367	UL (E328191), --
15-04b. USB Polyswitch (U59) - alternate	PERICOM SEMICONDUCTOR CORP	PI5USB2546HZHDE	Range: 4.5V-5.5V, Cont.current:0.03-2.5A, Prot.current:0.1-3.18A, Temp Range:-30 to 70 degree C, TNC 1.	UL2367	UL (E340734), --
15-05. USB Polyswitch (U45)	LITTELFUSE INC	AX8714, followed by FL, FH, followed by BTA, BA, SA, or U8A	Range: 2.9V-5.5V, Cont.current:3A, Prot.current:4.2A, Temp Range:-30 to 70 degree C.	UL2367	UL (E353665), --

### Seção 76:

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
01. Power Supply Cord (optional)	Interchangeable	Interchangeable	Detachable, Min. 1.5m, Max. 4.5m long, 16 AWG Min. Type SVT or SJT or SPT-2 or NISPT-2 flexible cord, rated Min. 125V, if one end terminated in NEMA 5-15P; rated Min. 250V, if one end terminated in NEMA 6-15P, the other end in an appliance coupler.	UL817, UL62, UL498	UL, --
02. Interconnecting Cable (optional)	Interchangeable	Interchangeable	Max. 3.05m long, rated VW-1 or FT-1 or better.	UL758, UL1675, UL444	UL, --

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

84-IC-F0033 rev 10.0



# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **13/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
02a. Interconnecting Cable (optional) - alternate	Interchangeable	Interchangeable	Maximum 3.05m long, type CMP, CMR, CMG, CM.	UL444	--, UL
02b. Interconnecting Cable (optional) - alternate	Interchangeable	Interchangeable	With RJ-45 type connector.	UL1863	--, UL
03. Label	Interchangeable	Interchangeable	Min. 60 degree C, suitable for the surface supplied.	UL969	UL, --
03a. Label - alternate	Interchangeable	Interchangeable	Molded as part of enclosure. Hot stamping, laser etching or silk screened.	--	--, --
04. Wiring, Internal (Secondary SELV circuits)	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1 or FT-1; 80 degree C, Min. 30Vdc.	UL758	UL, --
05. Connectors and Receptacles (Secondary ELV/SELV circuits)	Interchangeable	Interchangeable	Metal/ Copper alloy pins housed in bodies of plastic rated Min. V-2.	UL94	UL, --
05a. Connectors and Receptacles (Secondary ELV/SELV circuits) - alternate	Interchangeable	Interchangeable	--	UL1977, UL498	UL, --
05b. Connectors and Receptacles (Secondary ELV/SELV circuits) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are mounted on V-1 class material.	--	--, --
05c. Connectors and Receptacles (Secondary ELV/SELV circuits) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are separated from electrical parts (other than insulated wires and cables) by at least 13mm of air or by a solid barrier of V-1 class material.	--	--, --
06. Internal Plastic Parts Materials	Interchangeable	Interchangeable	Min. V-2, or Min. HF-2.	UL94	UL, --
06a. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	Min. HB or HBF, when foamed plastic parts are separated from electrical parts (other than insulated wires and cables) by at least 13mm of air or by a solid barrier of V-1 class material.	UL94	UL, --
06b. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	The combination, when one or more layers of thin insulating material used on the surface application, comply with V-2 class material within the fire enclosure.	--	--, --
06c. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are mounted on V-1 class material.	--	--, --
06d. Internal Plastic Parts Materials (optional) - alternate	Interchangeable	Interchangeable	Flammability level is ignored, when small parts (Max. 4g or Max. 1750mm <sup>3</sup> ) are separated from electrical parts (other than insulated wires and cables) by at least 13mm of air or by a solid barrier of V-1 class material.	--	--, --
07. Insulating Tubing/ Sleeveing	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1 or FT-1.	UL224	UL, --
08. Printed Wiring Board (PWB)	Interchangeable	Interchangeable	Min. V-1, Min. 105 degree C.	UL796	UL, --
09. Enclosure	--	--	Metal, Min. 0.6mm thick. See enclosure 4-01 for detail.	--	--, --
09-01. Enclosure (Front Bezel & Rear side)	Interchangeable	Interchangeable	HB or better.	UL94	UL, --

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **14/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
10. Foot Rubber (filled in metal enclosure)	Interchangeable	Interchangeable	V-1 or better, min. 1.0mm thickness, filled in the metal enclosure bottom openings as part of fire enclosure.	UL94, UL746C	UL, --
11. Power supply (for unit with rating 3.25A)	DELTA ELECTRONICS INC	ADP-65FD B	Input: 100-240Vac, 1.5A, 50-60Hz; Output: 20Vdc, 3.25A; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E131881), CB by UL (DK-39157-UL)
11a. Power supply (for unit with rating 3.25A) - alternate	LITE-ON TECHNOLOGY CORP	PA-1650-72	AC Input: 100-240Vac, 50-60Hz, 1.8A; DC Output: 20Vdc/ 3.25A; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E132068), CB by TUV RH (JPTUV-057469)
11b. Power supply (for unit with rating 3.25A) - alternate	CHICONY POWER TECHNOLOGY CO LTD	A17-065N2A	Input: 1.8A 100-240V~ 50-60Hz; Output: 3.25A, 20V; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E143709), CB by Nemko (NO99354)
11c. Power supply (for unit with rating 3.25A) - alternate	Interchangeable	Interchangeable	Output: 20Vdc, min. 3.25A; 35 degree C min., Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL, CB
11d. Power supply (for unit with rating 3.25A or 4.5A) - alternate	DELTA ELECTRONICS INC	ADP-90XD B	Input: AC 100-240V, 1.5A, 50-60Hz; Output: 20Vdc/4.5A; 40 degree C, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E131881), CB by UL (DK-39163-UL)
11e. Power supply (for unit with rating 3.25A or 4.5A) - alternate	LITE-ON TECHNOLOGY CORP	PA-1900-72	I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 20Vdc, 4.5A; 40 degree C, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E132068), CB by TUV RH (JPTUV-044681-M2)
11f. Power supply (for unit with rating 3.25A or 4.5A) - alternate	Interchangeable	Interchangeable	Output: 20Vdc, min. 4.5A; 35 degree C min., Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL, CB
11g. Power supply - alternate	DELTA ELECTRONICS INC	ADL135NDC3A	Input: 100-240V~, 1.5A, 50-60Hz; Output: 20Vdc, 6.75A; 40 degree C, LPS, Altitude of operation Up to 5000m.	UL60950-1, IEC62368-1	UL (E131881), CB by UL (DK-63818-UL)
11h. Power supply - alternate	LITE-ON TECHNOLOGY CORP	ADL135NLC3A	Input: 100-240Vac, 50-60Hz, 2.5A; Output: 20Vdc, 6.75A; 40 degree C, Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL (E132068), CB by TUV RH (JPTUV-062043)
11i. Power supply - alternate	Interchangeable	Interchangeable	Output: 20Vdc, min. 6.75A; 35 degree C min., Altitude of operation Up to 5000m.	UL60950-1, IEC60950-1	UL, CB
12. Hard Disk (optional)	SEAGATE TECHNOLOGY L L C	ST3	12Vdc, 1.5A maximum, 5Vdc, 1.5A maximum.	UL60950-1, IEC60950-1	UL (E106814), --
12a. Hard Disk (optional) - alternate	Interchangeable	Interchangeable	5/12 V dc, 3.0/3.0A max.	UL60950-1, IEC60950-1	UL, --
13. Optical Disk Drive (optional)	LG ELECTRONICS INC	GUAX#, GUCx#, GUEX# DUCx#, DUEX#	DC 5V, 1.5A, Class III, CLASS 1 LASER PRODUCT.	UL60950-1	UL (E119002), --
13a. Optical Device Drive (optional) - alternate	Interchangeable	Interchangeable	Class 1 laser, 5/12Vdc, 3.0/3.0A max. Class III.	UL60950-1	UL, --
14. CPU Fan	FOXCONN TECHNOLOGY CO LTD	PVB070E12H-P01	12V, 0.95A, 17.5CFM.	UL507	UL (E231557), --
14-01. Heat sink for CPU fan	--	--	Consist of Aluminum part, overall see enclosure 4-04 for details.	--	--, --
14a. CPU Fan - alternate	ASIA VITAL COMPONENTS CO LTD	BAZA0817R2UP003	12V, 0.80A, 20.3CFM.	UL507	UL (E158191), --
14a-01. Heat sink for CPU fan	--	--	Consist of Aluminum part, overall see enclosure 4-02 for details.	--	--, --
14b. CPU Fan - alternate	DELTA ELECTRONICS INC	BUC0812VD-02	12V, 1.60A, 20.25CFM.	UL507, IEC60950-1	UL (E132003), TUV RH
14b-01. Heat sink for CPU fan	--	--	Consist of Aluminum part, overall see enclosure 4-03 for details.	--	--, --
14c. CPU Fan - alternate	Interchangeable	Interchangeable	Max. 12Vdc, 1.60A max., min. 17.5CFM.	UL507	UL, --
15. Mother Board	Interchangeable	IQ3X0IL	--	--	--, --

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **15/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
15-01. RTC Battery	PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA	CR2032*	3Vdc, maximum abnormal charging current 10mA, user replaceable against charging current by multiple components PD203 and PR224 rated 1Kohm.	UL1642	UL (MH12210), --
15-01a. RTC Battery - alternate	VIC-DAWN ENTERPRISE CO LTD	CR2032	3Vdc, maximum abnormal charging current 10mA, user replaceable against charging current by multiple components PD203 and PR224 rated 1Kohm.	UL1642	UL (MH20550), --
15-02. Polyswitch (F2, F10)	BOURNS ELECTRONICS (TAIWAN) LTD	MF-USMF110	6Vdc, Ih=1.1A, It=2.2A, CA=1 (max. 110), 2, 3, 4. Tmoa=85 degree, C2.	UL1434, UL60730-1	UL (E174545), --
15-02a. Polyswitch (F2, F10) - alternate	LITTELFUSE INC	MICROSMD110F-2	6Vdc, Ih=1.1A, It=2.2A, CA=1 (max. 125), 2, 3, 4. Tmoa=85 degree, C1.	UL1434, UL60730-1	UL (E74889), --
15-03. USB Polyswitch (U27, U28, U29, U30)	UPI SEMICONDUCTOR CORP	Series uP7549, following by P, Q, R, S, T or U, then following by S8, SA8, M5, MA5, MC5, RA8 or RU8, then following by 25	2.7 to 5.5VDC, Cont.current:2.0A, Prot.current:5.0A, Temp range:-30 degree C to 70 degree C, TNC:1.	UL2367	UL (E316940), --
15-03a. USB Polyswitch (U27, U28, U29, U30) - alternate	POLYTRONICS TECHNOLOGY CORP	AX87, followed by 13, 23, followed by S, B, U8, may be followed by A	2.5 to 5.5VDC, Cont.current:2.0A, Prot.current:3.8A, Temp range:-30 degree C to 70 degree C.	UL2367	UL (E353665), --
15-04. USB Polyswitch (U59)	TEXAS INSTRUMENTS INC	SN1702001, may be followed by additional suffixes.	Range: 4.5V-5.5V, Cont.current:2.5A, Prot.current:3.1A, Temp Range:-40 to 85 degree C, TNC 1.	UL2367	UL (E169910), --
15-04a. USB Polyswitch (U59) - alternate	ANPEC ELECTRONICS CORP	APL3524QBI-TRG	Range: 4.5V-5.5V, Cont.current:0.15-2.5A, Prot.current:0.275-3.17A, Temp Range:-30 to 70 degree C, TNC 1.	UL2367	UL (E328191), --
15-04b. USB Polyswitch (U59) - alternate	PERICOM SEMICONDUCTOR CORP	PI5USB2546HZHDE	Range: 4.5V-5.5V, Cont.current:0.03-2.5A, Prot.current:0.1-3.18A, Temp Range:-30 to 70 degree C, TNC 1.	UL2367	UL (E340734), --
15-05. USB Polyswitch (U45)	LITTELFUSE INC	AX8714, followed by FL, FH, followed by BTA, BA, SA, or U8A	Range: 2.9V-5.5V, Cont.current:3A, Prot.current:4.2A, Temp Range:-30 to 70 degree C.	UL2367	UL (E353665), --

### Seção 78:

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Cord set (Optional)	Interchangable	Interchangable	---	NBR 14136, NBR NM 60884-1	INMETRO
Metal enclosure	Interchangable	Interchangable	Overall 89mm x 257mm x 340mm, min. 0.6mm thickness	IEC/EN 60950-1, UL 60950-1	Test with equipment
Plastic Front Panel	KINGFA SCI & TECH CO LTD	GAR-011	HB, min 0.80mm thick.	UL94, UL746C	UL E171666
Plastic Front Panel (Alternative)	BASF SE	GP-22	HB, min 0.80mm thick.	UL94, UL746C	UL E41871
Plastic Front Panel (Alternative)	KINGFA SCI & TECH CO LTD	FLEXBOND-10(n), KFLEX-2(n) (n:two digits to denote 1-50% Mineral Filler Content)	HB, min 0.80mm thick.	UL94, UL746C	UL E171666

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **16/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Plastic Front Panel (Alternative)	KINGFA SCI & TECH CO LTD	JH960 6(M), JH960 6(M) (ccc) (##), JH960-6(M) (ccc) (##) (M: three digits to represent customer reference number; ccc: any combinations of any letters excluding a letter "X" and/or any numerals for their special application may or may not follow; ##:ten digits maximum by a combination of letters and/or numbers as color code.)	HB, min 0.80mm thick.	UL94, UL746C	UL E171666
Plastic Front Panel (Alternative)	Interchangeable	Interchangeable	HB or better, min. 0.8 mm thickness.	UL 94, UL 764C	UL approved
Plastic Front Panel (Dust Cover) (Optional)	KINGFA SCI & TECH CO LTD	GAR-011	HB, min 0.80mm thick.	UL94, UL746C	UL E171666
Plastic Front Panel (Dust Cover) (Optional) (Alternative)	BASF SE	GP-22	HB, min 0.80mm thick.	UL94, UL746C	UL E41871
Plastic Front Panel (Dust Cover) (Optional) (Alternative)	KINGFA SCI & TECH CO LTD	FLEXBOND-10(n), KFLEX-2(n) (n:two digits to denote 1-50% Mineral Filler Content)	HB, min 0.80mm thick.	UL94, UL746C	UL E171666
Plastic Front Panel (Dust Cover) (Optional) (Alternative)	KINGFA SCI & TECH CO LTD	JH960 6(M), JH960 6(M) (ccc) (##), JH960-6(M) (ccc) (##) (M: three digits to represent customer reference number; ccc: any combinations of any lettersexcluding a letter "X" and/or any numerals for their special application may or may not follow; ##:ten digits maximum by a combination of letters and/or numbers as color code.)	V-0, min 0.80mm thick.	UL94, UL746C	UL E171666
Plastic Front Panel (Dust Cover) (Optional) (Alternative)	Interchangeable	Interchangeable	HB or better, min. 0.8 mm thickness.	UL 94, UL 764C	UL approved
PCB	CHUAN YI COMPUTER (SHENZHEN)CO LTD	CM-4	V-0, 130 °C	UL796, UL94, UL764A	UL E162264
PCB (Alternative)	PALWONN ELECTRONICS (SHENZHEN)CO LTD	M3	V-0, 130 °C	UL796, UL94, UL764A	UL E230435
PCB (Alternative)	Interchangeable	Interchangeable	V-1 or better, min.105 °C	UL796, UL94, UL764A	UL approved
PCB for PCI USB Card	CHUAN YI COMPUTER (SHENZHEN)CO LTD	CM-4	V-0, 130 °C	UL796, UL94, UL764A	UL E162264

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0



# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**

Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**

Página / Page **17/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**

*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
PCB for PCI USB Card (Alternative)	PALWONN ELECTRONICS (SHENZHEN)CO LTD	M3	V-0, 130 °C	UL796, UL94, UL764A	UL E230435
PCB for PCI USB Card (Alternative)	Interchangeable	Interchangeable	V-1 or better, min.105 °C	UL796, UL94, UL764A	UL approved
Built-in Power Supply	FSP Group Inc.	FSP180-20TGBAB	Input: AC100-240V, 50/60Hz, 3A Output: DC+12V/15A; -12V/0.2A, 180W; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: JPTUV-067200- M1, UL E190414, cUL E190414
Built-in Power Supply (Alternative)	Shenzhen Huntkey Electric Co., Ltd.	HK280-72PP, HK280-72PP xy (x=A-Z or blank, y=0-9 or blank)	Input: AC100-240V, 50/60Hz, 3.0A Output: DC+12V/15A; DC -12V/0.2A; Max.180W; +12V:Max.180W; -12V:Max.2.4W; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: SG-OF-12495, UL E181356, cUL E181356
Built-in Power Supply (Alternative)	Lite-On Technology Corporation	PA-2181-2XX (where X=0-9, A-Z, or - or blank, for marketing purpose only no safety impact)	Input: AC100-240V, 50/60Hz, 4A, class I Output: DC+12V, 15A max., DC-12V, 0.2A max.; Total Power: 180W max.; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: DK-61888-UL, UL E132068, cUL E132068
Built-in Power Supply (Alternative)	Acbel Polytech Inc.	PCG010	Input: AC100-240V, 50/60Hz, 3.0A; Output: DC+12V, 17.5A, DC-12V, 0.2A, 210W; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: JPTUV-078492, UL E131875, cUL E131875
Built-in Power Supply (Alternative)	FSP Group Inc.	FSP210-20TGBAB	Input: AC100-240V, 50/60Hz, 3A Output: DC+12V/17.5A, - 12V/0.2A, 210W; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: JPTUV-067200- M1, UL E151113, cUL E151113
Built-in Power Supply (Alternative)	Shenzhen Huntkey Electric Co., Ltd.	HK310-71PP, HK310-71PP xy ("x" =A to Z or blank, "y" = 0 to 9 or blank, for marketing Purpose only)	Input: AC100-240V, 50/60Hz, 3.0A Output: +12V1/17.5A; -12V/0.2A; Max.210W; +12V:Max.210W; -12V:Max.2.4W; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: SG-OF-12495, UL E181356, cUL E181356
Built-in Power Supply (Alternative)	Lite-On Technology Corporation	PA-2221-3XX (X can be any character or blank)	Input: AC100-240V, 50/60Hz, 3.0A; Output: DC+12V, 17.5A; DC-12V, 0.2A; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: JPTUV-062750, UL E132068, cUL E132068
Built-in Power Supply (Alternative)	Acbel Polytech Inc.	PCE025	Input: AC 100-240V, 3.0A,50/60 Hz; Output: DC +12V/17.5A, -12.0V/0.2A; Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: JPTUV-062130- M1, UL E131875, cUL E131875

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

**Certificado No. / Certificate No.** UL-BR 19.0551  
**Data de Emissão / Date of issue** 12 de Abril de 2019 / April 12, 2019  
**Página / Page** 18/21

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Built-in Power Supply (Alternative)	Acbel Polytech Inc.	PCH015	I/P: 100-240Vac, 4.0A, 50/60Hz; O/P: +12V1/18.0A, +12V2/18.0A, -12V/0.2 A; total 260W max Altitude: up to 5000m	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1, CAN/CSA-C22.2 No. 60950-22	CB Cert. No.: JPTUV-082436-M1, UL E131875, cUL E131875
DC Fan (For CPU)	DELTA ELECTRONICS INC	BUC1012VJ-00DHA	DC 12V, 1.0A, 20.98CFM	UL 507, CSA-C22.2 No. 113	UL E132003, cUL E132003
DC Fan (For CPU) (Alternative)	ASIA VITAL COMPONENTS CO LTD	BAZC0925R2UP006	DC 12V, 0.9A, 24.39CFM	UL 507, CSA-C22.2 No. 113	UL E158191, cUL E158191
DC Fan (For CPU) (Alternative)	Interchangeable	Interchangeable	DC 12V, 1.0A max., 20.98CFM min.	UL 507, CSA-C22.2 No. 113	UL and CSA approved
Optical Device Drive (Optional)	Hitachi-LG Data Storage inc.	CH20N	Class 1 laser, DC 5/12 V, 1.5/1.5 A.	IEC/EN 60825-1	ntertek S Certificate: 911330
Optical Device Drive (Optional) (Alternative)	Interchangeable	Interchangeable	Class 1(I), 5V/12Vdc, 3.0A/3.0A max.	IEC/EN 60825-1	TUV, VDE, Nemko approved
Hard Disk Drive (Optional)	SEAGATE TECHNOLOGY L L C	ST2000DM001	5 V/12 Vdc, 1.5A max	UL 60950-1, CAN/CSA C22.2 No. 60950-1	UL E106814, cUL E106814
Hard Disk Drive (Optional) (Alternative)	Interchangeable	Interchangeable	5 V/12 Vdc, 3.0A/3.0 A max.	UL 60950-1, CAN/CSA C22.2 No. 60950-1, IEC/EN 60950-1	UL and CSA approved , TUV, VDE, Nemko approved
Solid State Drive (Optional)	Samsung Eletronics Co., Ltd.	MZ-W***** (* is 0-9, A-Z or blank or slash or dash. 1st * means Line-up 2nd* means SSD controller 3rd, 4th, 5th * means SSD capacity 6th * means customized design 7th~10th * means customer list reference )	DC 12V, 1.85A or 2.5A	IEC/EN 60950-1, UL 60950-1, CAN/CSA C22.2 No. 60950-1	UL CB Cert. No.: DK-57680-UL, UL E149091, cUL E149091
Solid State Drive (Optional) (Alternative)	Interchangeable	Interchangeable	DC 12V, 2.5A max.	UL 60950-1, CAN/CSA C22.2 No. 60950-1	UL and CSA approved
Lithium Battery for RTC	VIC-DAWN ENTERPRISE CO LTD	CR2032	3 Vdc, maximum abnormal charging current 10 mA (Lithium Type)	UL 1642	UL MH20550
Lithium Battery for RTC (Alternative)	PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA	CR2032	3 Vdc, maximum abnormal charging current 10 mA (Lithium Type)	UL 1642	UL MH12210
Lithium Battery for RTC (Alternative)	MAXELL, LTD	CR2032	3 Vdc, maximum abnormal charging current 10 mA (Lithium Type)	UL 1642	UL MH12568
Poly Switch (F1, F2, F3)	BOURNS ELECTRONICS (TAIWAN) LTD	MF-USMF110	PTC, rated 6Vdc, holding current: 1.1 A, trip current: 2.2 A	UL 1434, CSA-C22.2 No. 72	UL E174545, cUL E174545
Poly Switch (F1, F2, F3) (Alternative)	TYCO ELECTRONICS CORP	microSMD110, microSMD110(11)F	PTC, rated 6V dc, holding current: 1.1 A, trip current: 2.2A	UL 1434, CSA-C22.2 No. 72	UL E74889, cUL E74889

**Organismo de Certificação /**  
**Certification Body**

**UL do Brasil Certificações**  
 Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
 São Paulo – SP – Brasil - 04571-010  
 T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

**Certificado No. / Certificate No.** UL-BR 19.0551  
**Data de Emissão / Date of issue** 12 de Abril de 2019 / April 12, 2019  
**Página / Page** 19/21

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Poly Switch (F1, F2, F3) (Alternative)	POLYTRONICS TECHNOLOGY CORP	SMD1210P110TFT	PTC, rated 8Vdc, holding current: 1.1 A, trip current: 2.2 A	UL 1434, CSA-C22.2 No. 72	UL E201431, cUL E201431
Poly Switch (F1, F2, F3) (Alternative)	LITTELFUSE INC	1210L110THYR, 1210L110TH	PTC, rated 8Vdc, holding current: 1.1 A, trip current: 2.2A	UL 1434, CSA-C22.2 No. 72	UL E183209, cUL E183209
IC Switch (U10, U23, U30, U33, U57, U59 U71, U74)	UPI SEMICONDUCTOR CORP	UP7549TMA5-25	2.7 to 5.5Vdc, Cont. current: 2.0A; Prot. current: 5.0A	UL 2367	UL E316940
IC Switch (U10, U23, U30, U33, U57, U59 U71, U74) (Alternative)	NIKO SEMICONDUCTOR CO LTD	GS7612S5MN, GS7632S5MN, GS7632S5MNR	2.0-5.5Vdc, Cont. current: 2.0A; Prot. current: 5.0A	UL 2367	UL E360303
IC Switch (U10, U23, U30, U33, U57, U59 U71, U74) (Alternative)	TEXAS INSTRUMENTS INC	TPS2001DDBVR, TPS2001	4.5-5.5Vdc, Cont. current: 2.0A; Prot. current: 3.6A	UL 2367	UL E169910
Heat Sink (above CPU)	--	--	Consist of Aluminum part	--	--
Graphics Card (Optional)	Shenzhen Bitland Information Technology Co., Ltd.	BD3G10 (P/N: GT 730)	DC 12V, 5.5A max; and DC 3.3V, 3A max; Class III	IEC/EN 60950-1, UL 60950-1, CAN/CSA-C22.2 No. 60950-1	TUVR CB Cert. No.:JPTUV- 076247, UL E356357, cUL E356357
Graphics Card (Optional) (Alternative)	Interchangeable	Interchangeable	DC 3.3V, DC12V (optional); Class III	UL 60950-1, CAN/CSA-C22.2 No. 60950-1	UL and CSA approved

### DOCUMENTOS / DOCUMENTS:

Título / Title	Número / Number	Revisão / Revision	Data / Date
<b>Relatório de ensaio emitido por / Test report issued by UL-CCIC Company Limited</b>	OFF-4786852502-A-1	0	2015-09-15
<b>Relatório de ensaio emitido por / Test report issued by QuieTek Corporation - Suzhou Testing Laboratory</b>	1570347R-IT-CE-P01V01	0	2015-08-19
<b>Relatório de ensaio emitido por / Test report issued by QuieTek Corporation - Suzhou Testing Laboratory</b>	1570347R-ITUSP01V02	0	2015-08-19
<b>Relatório de ensaio emitido por / Test report issued by Underwriters Laboratories Taiwan Co., Ltd.</b>	4787133880	0	2015-08-20
<b>Relatório de ensaio emitido por / Test report issued by Intertek Testing Services Shanghai</b>	150601410SHA-001	0	2015-08-17
<b>Relatório de ensaio emitido por / Test report issued by QuieTek Corporation - Suzhou Testing Laboratory</b>	1570349R-IT-CE-P01V01	0	2015-08-21
<b>Relatório de ensaio emitido por / Test report issued by QuieTek Corporation - Suzhou Testing Laboratory</b>	1570347R-ITUSP01V02	0	2015-08-24
<b>Relatório de ensaio emitido por / Test report issued by Underwriters Laboratories Taiwan Co., Ltd.</b>	4787062985	0	2015-08-25
<b>Relatório de ensaio emitido por / Test report issued by TÜV Rheinland (China) Ltd.</b>	16804576 001	0	2015-10-21
<b>Relatório de ensaio emitido por / Test report issued by QuieTek Corporation - Suzhou Testing Laboratory</b>	1570341R-IT-CE-P01V01	0	2015-10-30
<b>Relatório de ensaio emitido por / Test report issued by QuieTek Corporation - Suzhou Testing Laboratory</b>	1570341R-ITUSP01V02	0	2015-10-30
<b>Relatório de ensaio emitido por / Test report issued by Underwriters Laboratories Taiwan Co., Ltd.</b>	4787141290	0	2015-10-20
<b>Relatório de ensaio emitido por / Test report issued by UL-CCIC Company Limited</b>	OFF-4787141342-A-1	0	2015-12-28
<b>Relatório de ensaio emitido por / Test report issued by EMTEK (Shenzhen) Co., Ltd.</b>	ES151012034E	0	2016-02-01
<b>Relatório de ensaio emitido por / Test report issued by EMTEK (Shenzhen) Co., Ltd.</b>	ES151012034E-2	0	2016-08-11
<b>Relatório de ensaio emitido por / Test report issued by International Standards Laboratory</b>	ISL-16LE042FB	0	2016-01-22

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0

# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**  
Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**  
Página / Page **20/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

Relatório de ensaio emitido por / Test report issued by Underwriters Laboratories Taiwan Co., Ltd.	4787307591	0	2016-02-01
Relatório de ensaio emitido por / Test report issued by TUV Rheiland Japan Ltd.	JPTUV-076934	0	2016-12-01
Relatório de ensaio emitido por / Test report issued by EMTEK (Shenzhen) Co., Ltd.	ES160830026E	0	2016-11-25
Relatório de ensaio emitido por / Test report issued by Dekra Testing and Certification Co. Ltd.	16C2005E-ITUSP01V02	0	2017-01-11
Relatório de ensaio emitido por / Test report issued by TUV Rheiland Japan Ltd.	JPTUV-076935	0	2016-11-29
Relatório de ensaio emitido por / Test report issued by QuieTek Corporation - Suzhou EMC Laboratory	1692061E-MME-CE-P01V01	0	2016-11-23
Relatório de ensaio emitido por / Test report issued by TUV Rheinland (China) Ltd	50063530 002	0	2017-09-27
Relatório de ensaio emitido por / Test report issued by Intertek Testing Services Limited, Shanghai	180701932SHA-003	0	2018-08-02
Relatório de ensaio emitido por / Test report issued by EMTEK (Shenzhen) Co., Ltd.	ES171031992E	0	2018-04-04
Relatório de ensaio emitido por / Test report issued by EMTEK (Shenzhen) Co., Ltd.	ES171031998E	0	2018-04-04
Relatório de ensaio emitido por / Test report issued by UL-CCIC Company Limited	E307995-A422-CB-1	0	2018-04-11
Relatório de ensaio emitido por / Test report issued by Intertek Testing Services Limited, Shanghai	180701932SHA-004	0	2018-08-01
Relatório de ensaio emitido por / Test report issued by UL (Demko),	ACSCBIT18014	0	2018-04-17
Relatório de ensaio emitido por / Test report issued by EMTEK (Shenzhen) Co., LTD.	ES180327004E	0	2018-04-11
Relatório de ensaio emitido por / Test report issued by EMTEK (Shenzhen) Co., LTD.	ES180327005E	0	2018-04-11
Relatório de ensaio emitido por Nome do Laboratório / Test report issued by Laboratory Name UL-CCIC Company Limited	E307995-A421-CB-1	0	2018-04-13
Relatório de ensaio emitido por Nome do Laboratório / Test report issued by Laboratory Name DEKRA Testing & Certification (Suzhou) Co., Ltd.	1832081E-MME-CE-P01V01	0	2018-04-18
Relatório de ensaio emitido por Nome do Laboratório / Test report issued by Laboratory Name Intertek Testing Services Ltd., Shanghai	180701932SHA-005	0	2018-08-03
Relatório de ensaio emitido por Nome do Laboratório / Test report issued by Laboratory Name TÜV Rheinland (China) Ltd.	50132451 001	0	2018-04-04
Relatório de ensaio emitido por Nome do Laboratório / Test report issued by Laboratory Name DEKRA Testing & Certification (Suzhou) Co., Ltd.	1832062E-MME-CE-P01V01	0	2018-03-28
Relatório de ensaio emitido por Nome do Laboratório / Test report issued by Laboratory Name DEKRA Testing & Certification (Suzhou) Co., Ltd.	1832062E-IT-US-P01V01	0	2018-03-28
Relatório de ensaio emitido por Nome do Laboratório / Test report issued by Laboratory Name Intertek Testing Services Ltd., Shanghai	181000122SHA-001	0	2018-10-22
Relatório de ensaio emitido por / Test report issued by IBEC	R190726	0	
Relatório de ensaio emitido por / Test report issued by IBEC	R190727	0	
Relatório de ensaio emitido por / Test report issued by FIT	V19-020-SERV-02	0	

### OBSERVAÇÕES / OBSERVATIONS:

1. A validade deste Certificado está condicionada à realização das avaliações de manutenção e tratamento de possíveis não conformidades de acordo com as orientações da UL do Brasil Certificações e previstas nos procedimentos específicos. Para verificação da condição atualizada de regularidade deste Certificado de Conformidade deve ser consultado o banco de dados de produtos e serviços certificados do Inmetro.

*The validation of this certificate depends on the surveillance inspections performing and Non conformity treatments, according to UL do Brasil Certificações procedures. To verify the updated condition of regularity of this Conformity Certificate shall be consulted the certified products and services Inmetro database.*

**Organismo de Certificação /  
Certification Body**

**UL do Brasil Certificações**

Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0



# CERTIFICADO DE CONFORMIDADE

## CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 19.0551**  
Data de Emissão / Date of issue **12 de Abril de 2019 / April 12, 2019**  
Página / Page **21/21**

**Certificado de conformidade válido somente acompanhado das páginas de 1 até 21**  
*Certificate of conformity valid with pages from 1 to 21*

**2. Este certificado aplica-se aos equipamentos (produtos) idênticos ao protótipo avaliado e certificado, manufaturados na(s) unidade (s) fabril (is) mencionada (S) acima.**  
*This certificate applies to the products that are identical to the prototype investigated, certified and manufactured at the production site mentioned in this certificate.*

**3. Qualquer alteração no produto, incluindo a marcação, invalidará o presente certificado, salvo se o solicitante informar por escrito à UL do Brasil Certificações sobre esta modificação, a qual procederá à avaliação e decidirá quanto à continuidade da validade do certificado.**  
*Any non-authorized changes performed in the product, including marking, will invalidate this certificate. UL do Brasil Certificações must be notified about any desired change. This notification will be analyzed by UL do Brasil Certificações that will decide about certificate force.*

### Histórico de Revisões / Revisions Description:

17 de Abril de 2019 / April 17, 2019	Correção de erro de digitação conforme abaixo: / <i>Correction of typing error as below:</i> Unificação do certificado ULBR 18.0503, ULBR 18.0508 e ULBR 18.0696 à este certificado / Unification of the certificate ULBR 18.0503, ULBR 18.0508 and ULBR 18.0696 to this certificate.
12 de Abril de 2019 / April 12, 2019	Unificação do certificado ULBR 18.0225, ULBR 18.0322, ULBR 18.0697 e ULBR 18.0307 à este certificado / Unification of the certificate ULBR 18.0225, ULBR 18.0322, ULBR 18.0697 and ULBR 18.0307 to this certificate.
12 de Abril de 2019 / April 12, 2019	Emissão inicial com recertificação do certificado ULBR 16.0106 / <i>Initial Issue with renewal of certificate UL-BR 16.0106</i>
<b>A última revisão substitui e cancela as anteriores</b> <i>The last review replaces and cancels the previous ones</i>	

**Organismo de Certificação /**  
**Certification Body**

**UL do Brasil Certificações**  
Av. Engenheiro Luís Carlos Berrini, 105 – 24º Andar  
São Paulo – SP – Brasil - 04571-010  
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 10.0