## **Cyber Power**



FTTx SYSTEMS INDOOR

## CyberShield

12Vdc - 48Vdc Indoor FTTx Backup Power Solutions

## **Features**

- Indoor design
- · Audible alarm signals
- Microprocessor intelligent control
- Telemetry interface
- Optional extendable runtime
- Silenceable audible-alarm for signaling utility power failure and low battery

The CyberPower CyberShield indoor battery backup series provides cable telephone, wireless local loop (WLL) and fiber to the premise (FTTP) providers with a dependable and cost effective local power supply for customer premise equipment (CPE) during power outages. The CyberShield indoor family provides Multiple Service Operators with a local powering solution that has lower installation costs, lower operational costs and higher quality than competing power technologies.

(ONTs) or integrated access devices.



**MODELS** CS16U48V-8 CS50U48V CS50U48V3 CS50U48V3-G **AC INPUT** 90 - 264Vac Input Voltage Range 47 - 70Hz Input Frequency Range Input Power Cord IEC320 / C7, 2-Prong Cord IEC320 / C5, 3-Prong Cord **Output Ground Reference** Floating Ground Grounded DC OUTPUT On Battery Output Voltage 48Vdc with Over Voltage Protection Continuous Power Capability 16W 50W **Output Power Max** 16W 50W > 75% Efficiency (at Full Load) **BATTERY Battery Type** Sealed, Maintenance Free Lead-Acid Battery 8Ah / 12V x 1 20Ah / 12V x 1 Numbers of Battery Typical Recharge Time < 24 Hours Replaceable Yes SURGE PROTECTION & FILTERING Lightning / Surge Protection Yes WARNING DIAGNOSTICS **Audible Indicator** Utility Failure, Low Battery **LED Indicators** AC (Battery Mode Indicator), Output (On/Off Indicator), Battery (Missing/Replacement Indicator) MANAGEMENT Auto-Charge On Battery, Replace Battery, Missing, Low Battery Communication Interface **PHYSICAL** Maximum Dimensions (L\*W\*D) 16cm x 24cm x 8.3cm 30cm x 28cm x 9.9cm Weight (kg) 3.3 (with battery) 7.7 (with battery) **ENVIRONMENT Operating Temperature** 32°F - 104°F (0°C - 40°C) Operating Humidity 0 - 95% Non-condensing Max Operating Elevation 10,000 ft. (3,000 m) Max Storage Elevation 50,000 ft. (15,000 m) Storage Temperature 5°F - 113°F (-15°C - 45°C) COMPLIANCE

UL60950-1, FCC Part 15 Class B, CISPR 22 Class B

System







- 1. Audible Alarm On/Off (Rear)
- 2. LED Status Indicators

- 3. User Replaceable Battery
- 4. Alarm Silence & Cold Start Button

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your Voltage Range 90 – 136Vatc 90 – 264Vatc 47 – 70Hz yout Frequency Range 47 – 70Hz yout Frequency Range 47 – 70Hz your Fover Cord EC320 / CS, 3-Prong Cord EC320 / CS, 2-Prong Cord Utgut Cround Reiterence Pleasing Ground Fleterence Pleasing Fleterence Pleasing Fleterence Fleterence Pleasing Fle	MODELS	CS75A12V3	CS30U12V-20	DT30U12V	DT30U12V3	DT30U12V3-G		
	AC INPUT							
	Input Voltage Range	90 – 136Vac	90 – 264Vac		90 - 264Vac			
Posting Ground Reference   Floating Ground   Reating Ground   Reating Ground   Reating Ground   Reating Ground   Reating Output Votage	Input Frequency Range	47 –	70Hz		47 – 70Hz			
12   12   12   12   12   12   12   12	Input Power Cord	IEC320 / C5, 3-Prong Cord	IEC320 / C7, 2-Prong Cord	IEC320 / C7, 2-Prong Cord	IEC320 / C5,	3-Prong Cord		
## Battery Output Voltage   12Vide with Over Voltage Protection   30W	Output Ground Reference	Floating	Ground	Floating	Ground	Grounded		
Continuous Power Capability   75W   30W   3W   3	OC OUTPUT							
tutput Power Max	On Battery Output Voltage	12Vdc with Over	Voltage Protection	12Vdc with Over Voltage Protection				
ATTEMP   Sealed, Maintenance Free Lead-Acid Battery   Sealed, Maintenance Free Lead-Acid Battery	Continuous Power Capability	75W	30W	30W				
Attery Type   Sealed, Maintenance Free Lead-Acid Battery   Sealed, Maintenance Free Lead-Acid Battery   20Ah / 12V x 1   7.2Ah / 12V x 1	Output Power Max	75W	30W	30W				
Sealed, Maintenance Free Lead-Acid Battery   Sealed, Maintenance Free Lead-Acid Battery   Sealed, Maintenance Free Lead-Acid Battery   CAPA / 12V x 1   T. 2APA / 1	Efficiency (at Full Load)	>	75%	> 80	% @ Line Mode, > 90% @ DC	Mode		
Numbers of Battery         20Ah / 12V x 1         7.2Ah / 12V x 1           Uplical Recharge Time         < 24 Hours         14 Hours (80% Charged)           epidaceable         Yes         Yes           Inglée Rortection & FLTERING           Inglée Rortection & FLTERING           Inglée Rortection         Yes         Yes (6kV @ 8/20µs) per IEEE C62.41.2 and GR-1089           ARNING DIAGNOSTICS           Udible Indicator         Utility Failure, Low Battery         Utility Failure, Low Battery           ED Indicators         AC, Output, Battery         System Status, DC, Mute, Battery           ARNING DIAGNOSTICS           Udible Indicator         Utility Failure, Low Battery         Utility Failure, Low Battery           ARNING DIAGNOSTICS           Udible Indicator         AC, Output, Battery         System Status, DC, Mute, Battery           ARNING DIAGNOSTICS           Udicators         AC, Output, Battery         Utility Failure, Low Battery           Udicators         AC, Output, Battery         Utility Failure, Low Battery           Udicators         AC, Output, Battery         Utility Failure, Low Battery <th c<="" td=""><td>BATTERY</td><td></td><td></td><td></td><td></td><td></td></th>	<td>BATTERY</td> <td></td> <td></td> <td></td> <td></td> <td></td>	BATTERY						
Spricial Recharge Time   Canal And Strategies   Canal And Strateg	Battery Type	Sealed, Maintenance Free Lead-Acid Battery		Sealed, Maintenance Free Lead-Acid Battery				
Peplaceable   Yes   Yes	Numbers of Battery	20Ah /	12V x 1	7.2Ah / 12V x 1				
Surge Protection & Filtrering   Yes   Yes (6kV @ 8/20µs) per IEEE C62.41.2 and GR-1089	Typical Recharge Time	< 24	Hours	14 Hours (90% Charged)				
System   Section   Yes   Yes (6kV @ 8/20µs) per IEEE C62.41.2 and GR-1089	Replaceable	Yes		Yes				
ARNING DIAGNOSTICS  udible Indicator  Utility Failure, Low Battery AC, Output, Battery  AC, Output, Battery  ANAGEMENT  uto-Charge  Yes  Yes - Thermally compensated charging to manufaction interface  Tysicial  Maximum Dimensions (L*W*D)  30cm x 28cm x 9.9cm  AS 2 (with battery)  32°F - 104°F (0°C - 40°C)  Tysicial  Tysicial	SURGE PROTECTION & FILTERING							
dubble Indicator         Utility Failure, Low Battery         Utility Failure, Low Battery           ED Indicators         AC, Output, Battery         System Status, DC, Mute, Battery           ANAGEMENT           Tuto-Charge         Yes         Yes – Thermally compensated charging           Tommunication Interface         On Battery, Replace Battery, Missing Battery, Low Battery           Advisional Interface           John State	Lightning / Surge Protection	Yes		Yes (6kV @ 8/20µs) per IEEE C62.41.2 and GR-1089				
ED Indicators	WARNING DIAGNOSTICS							
ANAGEMENT  utto-Charge	Audible Indicator	Utility Failure, Low Battery		Utility Failure, Low Battery				
Yes	LED Indicators	AC, Outp	AC, Output, Battery		System Status, DC, Mute, Battery			
Available   Avai	MANAGEMENT							
Available   Avai	Auto-Charge	Yes		Yes – Thermally compensated charging				
Asxinum Dimensions (L*W*D) 30cm x 28cm x 9.9cm 16.76cm x 18.54cm x 8.13cm 8.2 (with battery) 7.7 (with battery) 3.25 (with battery)  WIRDNMENT  Aperating Temperature 32°F – 104°F (0°C – 40°C) -40°F (0°C – 40°C) -40°F (122°F) with derating to 24W  Apprating Humidity 0 – 95% Non-condensing  Asx Operating Elevation 10,000 ft. (3,000 m)  Asx Storage Elevation 50°F – 113°F (-15°C - 45°C) -45°C) -40°C)  MPLIANCE  System UL60950-1 , FCC Part 15 Class B UL60950-1 2nd Edition, FCC Part 15 Class B,  ARIANTS  Orth America (NEMA 1-15) - CS30U12V-20 DT30U12V  Orth America (NEMA 5-15) CS75A12V3 DT30U12V-NA3 DT30U12V-NA3-  uropean Schuko (CEE 7) DT30U12V-SC3 DT30U12V-SC3 DT30U12V-SC3-  ustralian/New Zealand (AS/NZS) DT30U12V-AZ3 DT30U12V-AZ3-  Inited Kingdom (BS 1363) - DT30U12V-UK3 DT30U12V-UK3-  DT30U12V-UK3-  ORDITATION TO THE TOP TOP TO THE TOP	Communication Interface		On Battery, F	Replace Battery, Missing Battery, Low Battery				
Veright (kg)   8.2 (with battery)   7.7 (with battery)   3.25 (with battery)	PHYSICAL							
VIRONMENT   32°F - 104°F (0°C - 40°C)	Maximum Dimensions (L*W*D)	30cm x 28cm x 9.9cm 16.76cm x 18.54		16.76cm x 18.54cm x 8.13cm	18.54cm x 8.13cm			
Operating Temperature   32°F - 104°F (0°C - 40°C)   -4°F - 113°F (-20°C - 45°C) at full power Operating at 50°C (122°F) with derating to 24W	Weight (kg)	8.2 (with battery)	7.7 (with battery)		3.25 (with battery)			
Operating Hemiperature   S32*F = 104*F (0*C = 40*C)   Operation at 50°C (122°F) with derating to 24W     Operating Humidity	ENVIRONMENT							
Operating Humidity	Operating Temperature	32°F – 104°I	= (0°C – 40°C)					
Max Operating Elevation 10,000 ft. (3,000 m)  Max Storage Elevation 50,000 ft. (15,000 m)  Max Storage Temperature 5°F – 113°F (-15°C - 45°C) -4° – 113°F (-20°C – 45°C)    OMPLIANCE		02 1 104 1 (0 0 40 0)						
Max Storage Elevation   50,000 ft. (15,000 m)								
Source   S				. , , ,				
DMPLIANCE   System	-	FOE 4400F ( 4500 4500)						
Lystem         UL60950-1 , FCC Part 15 Class B         UL60950-1 2nd Edition, FCC Part 15 Class B,           ARIANTS         ARIANTS         DT30U12V         —         —           Jorth America (NEMA 1-15)         —         CS30U12V-20         DT30U12V         —         —         —           Jorth America (NEMA 5-15)         CS75A12V3         —         —         DT30U12V-NA3         DT30U12V-NA3-0         DT30U12V-NA3         DT30U12V-NA3-0         DT30U12V-SC3         DT30U12V-SC3-0         DT30U12V-SC3         DT30U12V-AZ3-0         DT30U12V-AZ3         DT30U12V-AZ3-0         DT30U12V-UK3-0         DT30U1		5°F – 113°F (-15°C - 45°C)		-4° – 113°F (-20°C – 45°C)				
ARIANTS    Iorth America (NEMA 1-15)		111.00050 4 50	C Down 15 Class D	LH 000	E0 1 0nd Edition E00 Part 45 0	Ness D		
Iorth America (NEMA 1-15)         —         CS30U12V-20         DT30U12V         —         —           Iorth America (NEMA 5-15)         CS75A12V3         —         —         DT30U12V-NA3         DT30U12V-NA3-O           Juropean Schuko (CEE 7)         —         —         DT30U12V-SC3         DT30U12V-SC3-O           Justralian/New Zealand (AS/NZS)         —         —         —         DT30U12V-AZ3         DT30U12V-AZ3-O           Inited Kingdom (BS 1363)         —         —         —         DT30U12V-UK3         DT30U12V-UK3-O	,	ULOU95U-1, FUU PAIT 15 CIASS B		UL60950-1 2nd Edition, FUU Part 15 Class 8,				
Iorth America (NEMA 5-15)         CS75A12V3         -         -         DT30U12V-NA3         DT30U12V-NA3-C           uropean Schuko (CEE 7)         -         -         DT30U12V-SC3         DT30U12V-SC3-C           ustralian/New Zealand (AS/NZS)         -         -         -         DT30U12V-AZ3         DT30U12V-AZ3-C           Inited Kingdom (BS 1363)         -         -         -         DT30U12V-UK3         DT30U12V-UK3-C			C63UI13N 3U	DT301113V				
uropean Schuko (CEE 7)         -         -         DT30U12V-SC3         DT30U12V-SC3-CC           ustralian/New Zealand (AS/NZS)         -         -         -         DT30U12V-AZ3         DT30U12V-AZ3           Inited Kingdom (BS 1363)         -         -         -         DT30U12V-UK3         DT30U12V-UK3	, ,			D130012V				
Justralian/New Zealand (AS/NZS)         -         -         DT30U12V-AZ3         DT30U12V-AZ3         DT30U12V-AZ3-C           Inited Kingdom (BS 1363)         -         -         -         DT30U12V-UK3         DT30U12V-UK3-C	, ,	OUTUATZVO	_	_				
Inited Kingdom (BS 1363) – – DT30U12V-UK3 DT30U12V-UK3-C	. , ,	<del>-</del>	_					
	, ,							
razii (NBK 14136) – – D130U12V-BZ3 DT30U12V-BZ3-C	<u> </u>	_		_				
	Brazil (NBR 14136)	-	-	-	DT30U12V-BZ3	DT30U12V-BZ3-G		



- 1. Alarm Silence & Cold Start Button
- 2. LED Status Indicators
- 3. User Replaceable Battery

## CSN27U12V

MODELS	CSN27U12V-12	CSN27U12V-XL	CSN27U12V	CSN27U12V3	CSN27U12V3-G
AC INPUT					
Input Voltage Range			90 – 264Vac		
Input Frequency Range			47 – 70Hz		
Input Power Cord		IEC320 / C7, 2-Prong Cord		IEC320 / C5,	3-Prong Cord
Output Ground Reference		Floating	g Ground		Grounded
DC OUTPUT					
On Battery Output Voltage		1	2Vdc with Over Voltage Protection	on	
Continuous Power Capability			27W		
Output Power Max			30W < 5 sec.		
Efficiency (at Full Load)		> 80	0% @ Line Mode, > 90% @ DC I	Mode	
BATTERY					
Battery Type		Seale	d, Maintenance Free Lead-Acid E	Battery	
Numbers of Battery	12Ah / 12V x 1	7.5Ah / 12V x 1		7.2Ah / 12V x 1	
Typical Recharge Time	< 25 Hrs. 14 Hrs. (90% Charged)				
Replaceable	Yes				
SURGE PROTECTION & FILTERING					
Lightning / Surge Protection		Yes (6kV @	@ 8/20µs) per IEEE C62.41.2 and	d GR-1089	
WARNING DIAGNOSTICS					
Audible Indicator	Utility Failure, Low Battery				
LED Indicators	Replace Battery, Mute, DC, System Status				
MANAGEMENT					
Auto-Charge	Yes – Thermally compensated				
Communication Interface	On Battery, Replace Battery, Missing Battery, Low Battery				
PHYSICAL					
Maximum Dimensions (L*W*D)	16.7cm x 19cm x 8.3cm				
Weight (kg)	3.03 (with battery)				
ENVIRONMENT					
Operating Temperature	-4° – 113°F (-20°C – 45°C), Operation at 50°C (122°F) with Derating to 18W				
Operating Humidity	0 – 95% Non-condensing				
Max Operating Elevation	10,000 ft. (3,000 m)				
Max Storage Elevation	50,000 ft. (15,000 m)				
Storage Temperature			-4° – 113°F (-20°C – 45°C)		
COMPLIANCE					
System		UL60950-1 2nd	d Edition, FCC Part 15 Class B, Cl	SPR 22 Class B	
VARIANTS					
North America (NEMA 1-15)	CSN27U12V-12	CSN27U12V-XL	CSN27U12V	_	_
North America (NEMA 5-15)	-	-	-	CSN27U12V-NA3	CSN27U12V-NA3-G
European Schuko (CEE 7)	-	-	CSN27U12V-SC2	CSN27U12V-SC3	CSN27U12V-SC3-G
Australian/New Zealand (AS/NZS)	-	-	CSN27U12V-AZ2	CSN27U12V-AZ3	CSN27U12V-AZ3-G
United Kingdom (BS 1363)	-	-	CSN27U12V-UK2	CSN27U12V-UK3	CSN27U12V-UK3-G
Brazil (NBR 14136)	-	-	-	CSN27U12V-BZ3	CSN27U12V-BZ3-G
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Note (1): If the units are needed without batteries, please add "-SB" to the end of the part number while placing orders. (i.e. CSN27U12V-SB)

Note (2): If the units are needed without power cables, please add "-NC" to the end of the part number while placing orders. (i.e. CSN27U12V-NC)

Note (3): The model, CSN27U12V-XL, includes the battery which has longer cycle life.

Note (4): The CSN27U12V-12 basically shares the same plastic enclosure with the CSN27U12V but has a higher battery compartment cover.

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