Prolink PRO700SFC

Prolink PRO700SFC 650VA Line-Interactive UPS User Manual

Uninterruptible Power Supply with Super-Fast Charging and AVR

1. INTRODUCTION

The Prolink PRO700SFC series is a single-phase input/single-phase output Line-Interactive Uninterruptible Power Supply (UPS) system. It incorporates Prolink's Super-Fast Charging technology, enabling the battery to recharge to 90% capacity within 2-4 hours. This system is designed to provide stable backup power for home and small office applications, protecting connected equipment from power disturbances.
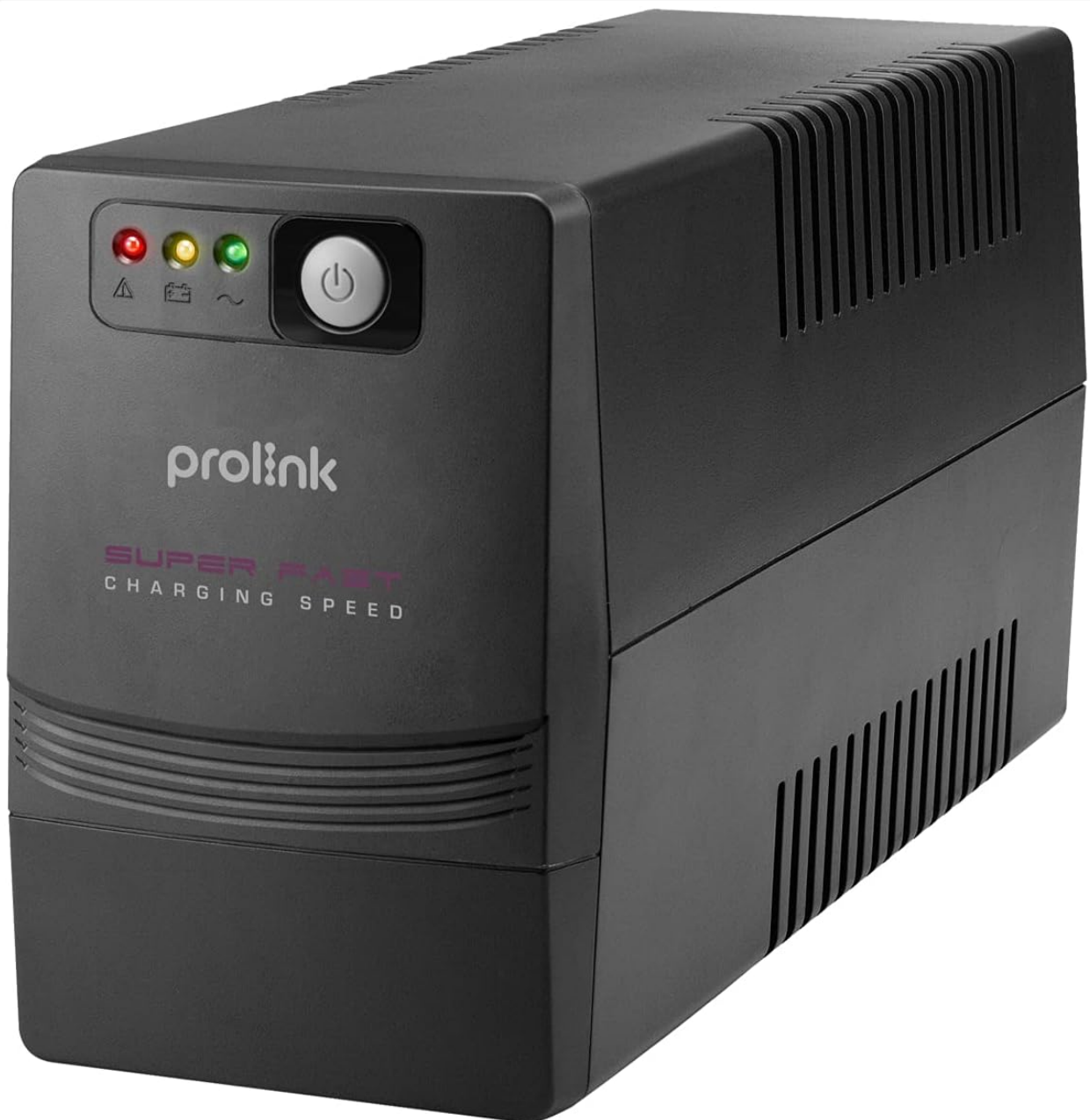
Figure 1: Front view of the Prolink PRO700SFC 650VA UPS.

2. Key Features

- **Super Fast Charging:** The battery can be recharged to 90% of its capacity within 2-4 hours.
- **Surge Protection:** Provides protection for connected equipment from incoming spikes and surges, safeguarding your network.
- **Advanced Early Warning:** Alerts users to output overload, high temperature, or low battery conditions, allowing time to correct the situation or safely shut down systems.
- **Overload Protection:** Initiates an alarm and automatic shutdown in case of overload, prolonging the UPS lifespan.
- **Over Temperature Protection:** Shuts down the power supply if internal temperatures become unacceptably high.

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Line Interactive UPS

PRO700SFC/SFCU

Super Fast Charging	True AVR	Wide Input Voltage	Overload Protection	Over Temperature Protection	Surge Protection	Early Shutdown Warning System	Universal Socket

The **PRO700SFC/SFCU is a single-phase input/ single-phase output Line-Interactive 650VA UPS** is a single-phase input/ single-phase output Line-Interactive UPS system with PROLiNK's latest Super-Fast Charging technology. This cutting-edge technology is able to recharge the battery back to 90% of its capacity within 2-4 hours, perfect for areas with intermittent power.

Advance Early Warning system immediately alerts you to an output overload, high temperature or low battery condition, giving you ample time to either correct the condition or shut down your system before battery time runs out.

Intelligent Battery Management system provides additional protection for battery overcharging or deep discharging, while maximizing battery performance, life and reliability through intelligent precision charging. In the event of over temperature and overload, the device will automatically shutdown to prevent any damage from occurring.

Lastly, this device is supported with a wide input voltage range. The unit also comes with universal sockets to provide better compatibility with a wider range of connected devices.

PRO700SFC/SFCU is an ideal solution for safe and stable backup power to home/ small office applications.

Key Features

- Built-in super fast charger, battery can be recharged to 90% of its capacity within 2-4 hours
- Excellent microprocessor control guarantees high reliability
- Boost and buck AVR for voltage stabilization
- Auto restart while AC is recovering
- Simulated sine wave
- Off-mode charging
- Cold start function
- Optional USB communication port
- Optional HID Compliant USB (for PRO700SFCU)

Legend:
1. Power AC Input
2. Backup Outlets
3. USB Port (Only for PRO700SFCU)

Figure 2: Key features and benefits of the Prolink PRO700SFC UPS.

3. PRODUCT OVERVIEW

3.1 Front Panel

The front panel features LED indicators and a power switch for easy operation and status monitoring.

3.2 Rear Panel

The rear panel provides connections for power input, backup outlets, and communication ports.

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Specifications

Capacity		650VA
Input	Voltage Range Frequency Phase	140 ~ 300VAC ±5% 50Hz/60Hz (Auto-sensing) Single + GND
Output	Voltage Range Battery Mode Frequency Waveform Transfer Time	230VAC +12% – 14% 230VAC ±10% 50Hz ±1% (Battery mode) Simulated sine wave (Battery mode) Sine wave (AC mode) 2ms typical
Battery	Type Backup Time Recharge Time	12V/8.2AH – 1pc 8 – 30 mins depending on load 2 – 4 hours recover to 90% capacity

**Protection/
Monitoring**
	Short Circuit Protection
	Surge Protection
	Alarm
	Overload Protection
	
	Intelligent Battery
	Management
		Yes (Line mode & battery mode)
		Yes
		Audible & Visual
		Line mode : 100 – 120% 5 mins change to fault mode
		                  >120% change to fault mode immediately
		Battery mode : 100 – 120% 5 secs shutdown
		                  >120% shutdown immediately
		Prevent overcharging of battery
		Protect battery and prolong battery life

Interface	USB Connector*	AC fault, battery low, shutdown UPS
General	Noise Level Temperature Humidity Power Factor Built-in AVR	<40dB 0˚C – 40˚C 0 – 90% Up to 0.7 TRUE Full AVR (3 steps)
Physical	Dimension (D x W x H) Weight	279 x 101 x 142 4.2kg

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Figure 3: Front and Rear Panel Layout of the PRO700SFC(U) UPS.

Figure 4: Detailed view of the rear panel connections.

4. SETUP INSTRUCTIONS

1. **Unpacking:** Carefully remove the UPS from its packaging. Inspect for any shipping damage.

2. **Placement:** Place the UPS in a well-ventilated area, away from direct sunlight, heat sources, and excessive moisture. Ensure sufficient clearance around the unit for proper airflow.

3. **Initial Charging:** Before initial use, connect the UPS to a standard AC power outlet for at least 8 hours to ensure the battery is fully charged. The UPS will charge whether it is turned on or off.

4. **Connecting Equipment:** Plug your computer, modem, wireless router, and other critical network equipment into the backup outlets on the rear panel of the UPS. Do not connect surge protectors or power strips to the UPS outlets.

5. **Power On:** Press and hold the power button on the front panel until the UPS powers on. The LED indicators will illuminate to show the operational status.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

- **To Power On:** Press and hold the power button for approximately 3 seconds.
- **To Power Off:** Press and hold the power button for approximately 3 seconds until the unit shuts down.

5.2 LED Indicators

The front panel LEDs provide visual status of the UPS:

- **Battery Mode LED:** Green Flashing indicates the UPS is operating on battery power.
- **AC Mode LED:** Green Lighting indicates the UPS is operating on utility power.

5.3 Automatic Voltage Regulation (AVR)

The PRO700SFC features Automatic Voltage Regulation (AVR) to stabilize incoming utility power. If the input voltage fluctuates outside acceptable limits, the AVR function will automatically adjust the output voltage to a safe range without switching to battery power, thus preserving battery life.

5.4 Battery Mode Operation

During a power outage or significant voltage fluctuation beyond AVR capabilities, the UPS will automatically switch to battery power. An audible alarm will sound, and the Battery Mode LED will flash. This provides time to save your work and safely shut down connected equipment.

6. MAINTENANCE

- **Battery Care:** To maximize battery life, ensure the UPS is connected to AC power at all times. Periodically discharge the battery completely (e.g., once every 3-6 months) by unplugging the UPS from the wall and allowing it to run on battery until it shuts down, then fully recharge it.
- **Cleaning:** Keep the UPS clean and free of dust. Use a dry cloth to wipe the exterior. Do not use liquid or aerosol cleaners. Ensure ventilation openings are not blocked.
- **Storage:** If storing the UPS for an extended period, ensure the battery is fully charged. Recharge the battery every three months to prevent permanent damage.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
UPS does not power on	No AC input power; Low battery; UPS fault	Check power cord connection; Allow UPS to charge for 8 hours; Contact support
Short backup time	Battery not fully charged; Battery end-of-life; Overload	Charge battery fully; Replace battery; Reduce connected load
Continuous alarm in AC mode	Overload; Over temperature	Reduce connected load; Ensure proper ventilation
UPS switches to battery frequently	Unstable utility power; Input voltage out of range	Check utility power quality; Ensure UPS is connected to a stable power source

8. SPECIFICATIONS

Category	Specification
Capacity	650VA
Input Voltage Range	140 - 300VAC ±5%
Input Frequency	50Hz/60Hz (Auto-sensing)
Output Voltage Range	230VAC +12% - 14%
Output Waveform	Simulated Sine Wave (Battery mode)
Transfer Time	2ms typical
Battery Type	12V/7.2AH - 1pc
Battery Backup Time	8 - 30 mins (depending on load)
Battery Recharge Time	2 - 4 hours recover to 90% capacity
Protection/Monitoring	Short Circuit Protection, Surge Protection, Alarm, Overload Protection
Interface	USB Connector* (for PRO700SFCU model)
Noise Level	<40dB
Operating Temperature	0°C - 40°C
Humidity	0 - 90%
Power Factor	Up to 0.7

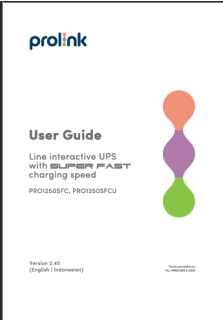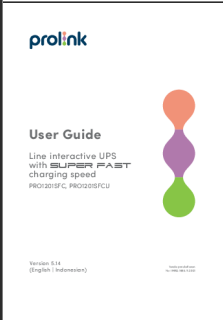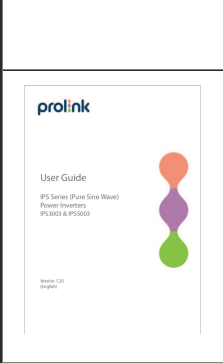| Category	Specification
Built-in AVR	TRUE Full AVR (3 steps)
Dimensions (D x W x H)	279 x 101 x 142 mm
Weight	4.2 kg

*Specifications are subject to change without prior notice.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official Prolink website. Keep your purchase receipt as proof of purchase for warranty claims.

Related Documents - PRO700SFC

[Prolink PRO1250SFC/SFCU User Guide: Line Interactive UPS with Super Fast Charging](#)
Comprehensive user guide for the Prolink PRO1250SFC and PRO1250SFCU line interactive UPS systems, covering installation, operation, maintenance, troubleshooting, and specifications. Features super fast charging.

[Prolink PRO1201SFC/SFCU User Guide: Line Interactive UPS with Super Fast Charging](#)
Comprehensive user guide for the Prolink PRO1201SFC and PRO1201SFCU Line Interactive UPS models, covering safety, installation, operation, software, maintenance, troubleshooting, and specifications. Features super fast charging technology.

[Prolink IPS Series Pure Sine Wave Power Inverters User Guide (IPS3003 & IPS5003)](#)
This user guide provides comprehensive information on the Prolink IPS Series Pure Sine Wave Power Inverters, models IPS3003 and IPS5003. Learn about installation, operation, safety, troubleshooting, and specifications for these reliable power solutions.

Prolink PRO802-ERS-V 2KVA UPS User Guide | Installation, Setup, Operations, and Troubleshooting

Comprehensive user guide for the Prolink PRO802-ERS-V 2KVA Uninterruptible Power Supply (UPS). Covers installation, setup, operations, troubleshooting, and specifications.

Prolink Professional II/II+ Series UPS User Guide

Comprehensive user guide for Prolink Professional II/II+ Series (1P/1P) Tower & Rack Type UPS models PRO900-WS/WL, PRO900-WRS/WRL, PRO900-ES/EL, PRO900-ERS/ERL (6-10KVA), covering safety, installation, operation, LCD settings, troubleshooting, maintenance, and specifications.

Prolink Professional II+ Series UPS User Guide

User guide for the Prolink Professional II+ Series (1P/1P) Tower Type UPS, models PRO900-ESI, 1-3KVA, featuring a built-in isolation transformer. Covers safety warnings, installation, setup, operations, troubleshooting, storage, maintenance, specifications, and isolation transformer details.