

# Mobile DC UPS

## StartGuard™

The abrupt DC system voltage drop that accompanies engine starting can cause microprocessor-based voice and data transmitters to "dump" programmed memory.



Provides Voltage Protection During Engine Start

StartGuard solves this problem by providing supplemental voltage to sensitive electronics while the engine is cranked. It contains a sealed rechargeable battery which is switched on-line to electronics when the starter switch or solenoid is engaged. When the engine is running StartGuard automatically goes off-line and the internal battery is recharged by the alternator.

### Specifications

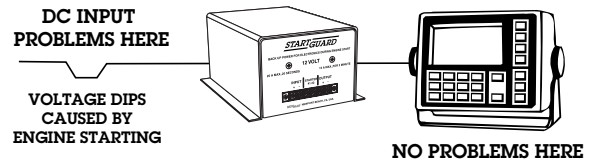
**Input Voltage:** 13.8 - 14.8 VDC nominal, 15.5 VDC max.

**Relay Activation Input Voltage:** 7-15 VDC

**Output:** 20 amps max.

**Battery:** 12 VDC, sealed rechargeable, 5- 7 year life (typical) 5 amp-hour capacity, Certified by DOT and IATA for shipment by air.

**Back-up Capacity (Fully Charged):** (See matrix)



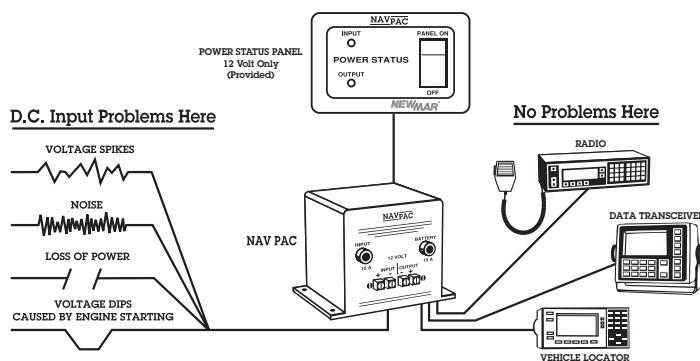
Model	Input	Back-Up Capacity		Dimensions		Weight	
		1 Minute	2 Minutes	Inches	Centimeters	Lbs	Kg.
NS-12-20	13.8-14.8 VDC Nominal 15.5 VDC Max	20 amps	18 amps	8.25 x 4.9 x 3.5	20.1 x 12.5 x 8.9	5.5	2.5

## NAV-PAC™

Mobile communication electronics such as programmable two-way radio and data transceivers, vehicle location systems and other microprocessor-controlled devices require clean and steady DC input power. Their sensitive circuitry is highly vulnerable to voltage drop from engine start, noise and line spikes from alternators and motors, and conducted noise from various other electronic devices. NAV-PAC prevents all of these problems and is in use by thousands of Emergency Vehicles nation wide.

- Prevents voltage "drop-out" during engine start
- Absorbs line "spikes"
- Filters out electrical interference
- Provides supplemental voltage/battery back-up for up to 15 min.
- Remote monitor panel provided

Provides Continuous Voltage Protection



**Model:** NP-12, NP-24

**U.S. PATENT #:** 5172292

**Output:** 20 amps Max. @ 12 Volt; 15 amps Max. @ 24 Volt

### Back-Up Power:

8 Amps for fifteen (15) minutes

12 Amps for eight (8) minutes

18 Amps for two (2) minutes

20 Amps for one (1) minute

**Battery:** Sealed Rechargeable 5.0 Amp-Hour, 5-7 years typical life, can be replaced. Low-voltage disconnect circuit protects battery from total discharge. Certified by DOT and IATA for shipment by air.

**Noise Filtering:** Audio through 200 MHZ

**Voltage Spike Protection:** Transient energy capability; 100 Joules, 4,000 amps Max (8 x 20 micro seconds)

Model	Input	Back-Up Capacity		Dimensions		Weight	
		1 Minute	2 Minutes	Inches HxWxD	Centimeters HxWxD	Lbs	Kg.
NP-12	13.8-14.8 VDC Nominal, 15.5 VDC Max	20 amps	15 amps	5.25 x 6.2 x 7.2	13.3 x 15.7 x 18.8	5.9	2.7
NP-24	27.6-29.6 VDC Nominal, 31.0 VDC Max	20 amps	15 amps	6 x 7.75 x 7.5	15.24 x 17.14 x 19	8	3.6



*Powering the Network*