

# APPLIED INNOVATIVE TECHNOLOGIES, INC.

Developing useful and unique products that have lasting performance

## PICTURE

### *Pulstar™ Magnetic Force Strobe Light*

**No Batteries Required**

**Simply Shake to Recharge**

**The ideal location beacon for emergency and survival kits**

**Backed by a 5-year Warranty**

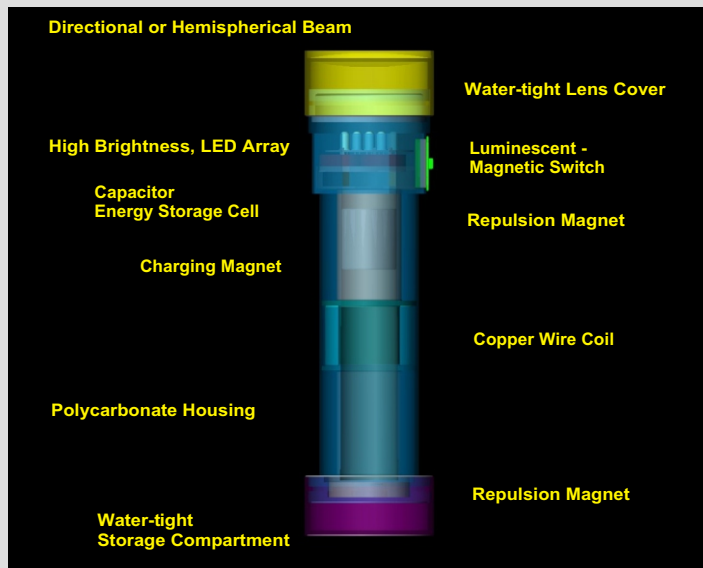


#### Key Features

- Visible up to 30 Miles Away
- Directional or Hemispherical Beam Projection System
- Magnetic Charging System
- Heavy-duty Energy Storage Cell
- High Impact Strength Lightweight Housing
- Waterproof, Corrosion Proof
- Luminescent Switch
- Floats with Lamp in Upright Position
- Water-tight Storage Compartment can hold Tools or a Small Knife (Optional accessory)
- Water-tight Lens-Cover spreads the beam into a near hemispherical pattern. The Cover can be removed and used as a Magnifying glass. (Optional accessory)

**"A.I.T. Proprietary Information"**

## DESCRIPTION



Simply shaking *Pulstar* for 60 seconds provides more than 5 minutes of brilliant light bursts flashing once per second. When shaken, a high strength magnet generates electrical energy as it passes through a wire coil. Magnets oriented to repel the charging magnet are mounted at both ends of the light. *Pulstar's* patented Mag-Lev recoil system smoothly rebounds the charging magnet back through the coil, efficiently transforming motion into electrical energy. The energy generated is stored in a capacitor. Superior to a battery, the capacitor will never corrode, can recharge several hundred thousand times and will power the 13-LED array even under extreme hot and cold temperatures. Equally impressive, the LEDs used in *Pulstar* are nearly unbreakable and have a rated lifetime of over 50,000 hours! The LEDs in *Pulstar* are driven to a maximum 60,000 mcad output by a specially designed circuit, which delivers short, high energy electrical pulses to the diode array. The light burst from the array is a highly directional, 20 degree full angle beam. With the slip-on Lens Cover the beam spreads out into a near hemispherical, 70 degree full angle beam. *Pulstar* also has a unique magnetic switch, which is reliable, watertight and non-sparking. In addition, the luminescent switch will glow all night after only minutes of exposure to external light, allowing *Pulstar* to be easily located and operated in dark environments. *Pulstar's* state of the art components are contained within a waterproof, corrosion proof and virtually indestructible polycarbonate housing, ensuring that even after years of abuse and neglect, light is there when you need it most.

## TECHNICAL DETAILS

[Expected results based on NightStar tests]

### Temperature

Storage: -50F (-45C) to 140F (60C)  
Operation: -40F (-40C) to 130F (55C)

### Impact Resistance

Operational after repeated drops from a height of 5-ft onto a concrete surface. Drop orientations included front, side and back impacts.

### Corrosion Resistance

Operational after 3 days immersion in solutions of salt water, isopropyl alcohol, ammonia, phosphoric acid\*, acetic acid\*, drain cleaner\*, Ajax\*, motor oil and diesel fuel (\* 10% solutions).

### Submersion

Operational at an ocean depth of 160-ft (49m). [Equivalent pressure crush point: 70 PSI]

### Sound Emission (when shaken)

Overall A-Weighted Sound Power Level: 63.6 dB

No# of units	Distance (ft.)				
	1	10	100	1000	10000
1	65	45	25	5	0
12 (squad)	76	56	36	16	0
36 (platoon)	81	61	41	21	1
108 (company)	86	66	46	26	6

All values are A-Weighted Sound Pressure Levels and are predictions based on measured Overall A-Weighted Sound Power Levels of a single unit. For reference purposes, a pressure level of 40 is equivalent to an urban neighborhood at night far from roads. A pressure level of 20 is an empty recording studio

### Magnetic Field Strength

Single Unit:	@ 1ft.	@ 2ft.	@ 4ft.	@ 8ft.
Axis 1	0.03	0.005	0.0005	0.00001
Axis 2	0.06	0.007	0.0005	0.00001
Axis 3	0.13	0.028	0.0040	0.00050

1 Case (packed in alternating configuration):

Axis 1	0.22	0.002	0.0001	0.00001
Axis 2	0.006	0.001	0.00000	0.00000
Axis 3	0.06	0.006	0.001	0.00001

Note: All values are in Gauss. Axis 1 is parallel to the housing, Axis 2 is perpendicular to the housing, Axis 3 is perpendicular to the end of the light. For reference purposes, a field of 0.005 G deflects a compass needle by less than 1 degree.

### Weight / Mass / Length

11 ounces / 308 grams / 7" w/o options: 8" w/ options

## COST & PROJECTIONS

Pulstar Wholesale Pricing: (Preliminary Estimates)

Order Quantity:	20 - 2500	2501 - 5000	5001 +
Price / Unit :	\$43.50	\$42.00	\$40.50

[Price includes shipping to continental United States. International shipping cost is based upon ship to address. MSRP is U.S. \$86.95]

### Wholesale Purchasing Conditions:

1. Orders shall be secured through submission of company letterhead Purchase Order faxed to 303-857-8079. Supplier does not utilize Electronic Data Interchange (EDI) system.
2. Minimum Purchase - one case (20 units). Case weight is approximately 21 pounds (11.35 kg). Case Dimensions are approximately 16.25 x 13.25 x 12.25 inches.
3. Purchase Order shall reflect whole case quantities.
4. Purchase Order shall specifically identify Buyer's "Ship To" location information.
5. Attached to Purchase Order shall be instructions identifying Buyer's specific marking and/or labeling requirements that must appear on shipping carton.
6. Price includes Freight Prepaid to Continental United States locations non-palletized. Product ships by ground transportation utilizing freight forwarder of Supplier's choosing.
7. Price for shipping to International locations is Freight Collect - FOB Fort Lupton, CO. A handling charge of US\$2 per case is assessed for Product management. Buyer shall designate preferred freight forwarder.
8. A 50 percent deposit is required on orders exceeding 500 units.
9. Product releases are based upon customer payment status with Supplier.
10. Customized product (customer specific labels) requires 50% deposit with submission of Purchase Order and full acceptance of order upon completion of Product manufacturing.
11. Until credit terms are established with Supplier, company check or wire transfer shall secure purchases (U.S. Currency only). Expenses associated with submission of funds are the responsibility of Buyer.
12. Allow lead times of 4 weeks on orders up to 500 units. Without submission of order projections by Buyer, longer lead times may be experienced.
13. To neutralize the effects of the strong magnetic field created by *Pulstar*, product is packed so that the polarities of the individual units oppose one another. In this configuration *Pulstar* can be safely shipped by aircraft without special labeling or handling requirements.
14. A.I.T. at its sole discretion reserves the right to modify wholesale prices.
15. This price list incorporates Applied Innovative Technologies, Inc. Standard Terms and Conditions of Sale.