*Performance Report

Manual & Installation

Wireless Ped System™

NEW!

Retrofit accessible pedestrian signals (APS) wherever required - without trenching, foundations, or new wiring.

No wires	Save up to $65,000 on trenching!
Surface mount pole (no foundation)	Safer, simpler install with minimal disruption to utilities - in under an hour
2-way communication with Polara's PRM technology	Allows WPS to work at both actuated and pre-timed intersections
Field tested and reliable wireless connection	99.9%* communications uptime and WALK cycles serviced
Solar sized for long-term sustainability across N. America	Extended battery life and 6-10+ days of backup power
Easy setup via Field Service App	A secure encrypted connection in moments

ada COMPLIANT

meets MUTCD standards

BABA COMPLIANT Oct. 1, 2026

PROWAG

APS ordered separately

POLARA

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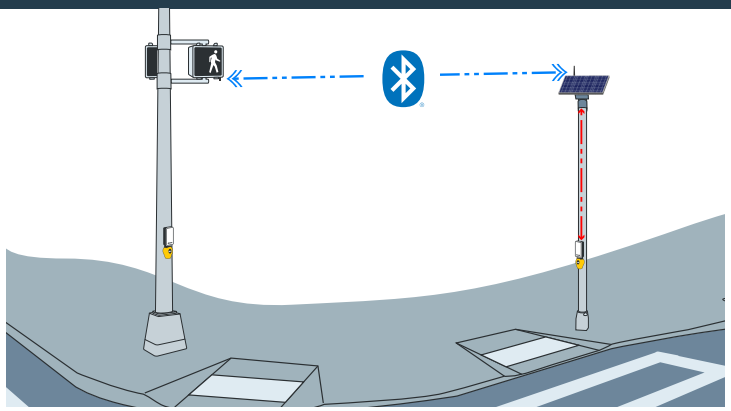
Powered by Synapse ITS

WIRELESS PED SYSTEM COMPONENTS



Included Components

- Wireless ped head control unit (WPC)
- 50 W solar kit with batteries
- 10 ft Frey pole (optional)
- Android/iOS setup app

Performance Requirements:

- Ensure access to sunlight.
- Ensure an unobstructed line of sight between the antennas on the signal head and the solar kit.
- Ensure both antennas are at the same height.
- Install the WPS between 5 and 20 ft from the signal head.

Wireless Ped Head Control Unit (WPC) Specifications

Property	Information
	No adjustments or replaceable parts.
Input	89-135 VAC.
	Built in surge-protection.
Power draw	2 W.
Operation modes	***Non-actuated.*** One-way wireless communication provides ped interval information to the Wireless Ped System from the existing ped head.
	Actuated. Two-way wireless communication provides ped interval information to the Wireless Ped System and allows the WPC to create a contact closure on existing ped wires when the APS is actuated.
Dimensions	6.02 in W x 3.5 in D x 1.26 in H.
Mounting	Easily installs in pedestrian signal head with included hardware kit and antenna assembly.
Environmental	Operating: -34 °C to +74 °C (-30 °F to +165 °F). Storage: -40 °C to +85 °C (-40 °F to +185 °F).
Warranty	3 year.

Design Compliance	
Functionality Test Type	**Compliance**
Temperature and Humidity	NEMA TS2.
Mechanical Shock and Vibration	NEMA TS2.
Transient Protection and Immunity	NEMA TS2, IEC61000-4-2 thru 6.
Radiated and Conducted Emissions	FCC Part 15, Class B.

Solar Kit Specifications

Property	Information
Integrated Solar Kit	50 W high-efficiency photovoltaic solar panel.
	Maximum Power Point Tracking with Temperature Compensation (MPPT-TC) battery charger for optimal energy collection in all solar and battery conditions.
	Proprietary Pedestrian Relay Module (PRM) allows 2-way wireless communication between APS and ped head.
	Houses solar panel, charge controller, PRM with antenna, and batteries.
	Weatherproof, gasketed enclosure with vents for ambient air transfer (NEMA 3R), padlockable.
	Corrosion-resistant aluminum with stainless steel hardware.
	Factory prewired for Accessible Pedestrian Signal (APS)
	2x 18 Ah maintenance-free, non-proprietary AGM batteries offer the widest temp. range and longest life.
	System designed for 5+ year battery life.
	Batteries can be easily replaced at low cost.
Solar Panel Dimensions	26.3 in L x 21.2 in W (668 mm L x 538 mm W), not including mount.
Mounting	Universal top-of-pole mounting hardware can mount on round poles between 3.5 in - 4.5 in OD.
Environmental	150 mph (241 kph) wind speed as per AASHTO LTS-6. Temperature Range (System): -34 °C – 74 °C (-29 °F – 165 °F). Temperature Range (Battery): -20 °C – 49 °C (-4 °F – 120 °F).
Warranty	3 year limited warranty on solar kit, 1 year limited warranty on batteries.

Pole Specifications (optional)

Property	Information		
Dimensions	Pole: 4.5 in outside diameter; 10 ft 9.5 in height. Base: 7 in wide, 10 in tall (included in pole height).		
Color	Natural, anodized, or powder coated (grey or black) finishes available.		
Installation	4 anchor bolts set 5 in into epoxy, -5 °C – 40 °C (-23 °F – 104 °F), internal cable tether for fast install.		
Material	Aluminum pole, cast aluminum base.		
AASHTO MASH Tested	100 mph wind certified.	Warranty	3 year defect warranty

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