

iDS2 / iNS2

CABINET CONTROLLED ACCESSIBLE PEDESTRIAN SIGNAL (APS)

Transportation networks should be safe and accessible to everyone. With Polara's industry-leading APS, they can be.

- Communicates information about the signal phases at intersections in non-visual formats for pedestrians with vision and hearing loss
- Touchless activation with accurate, customizable radar (iDS)
- Ultra-durable Hall-effect button rated to 20 million+ operations
- Operates over existing button wires
- Easy SDLC connection in most cabinets for safer installation
- Program wirelessly from your phone without costly devices or software

HYGIENIC TOUCHLESS ACTIVATION

Accurate and inconspicuous, our iDS (iDetect) model provides contactless activation within an adjustable detection range of 1-20 inches. Unlike other detection methods, Polara's radar unit is vandal-resistant and unimpeded by fog, ice, dust, paint, and more.

DURABLE DESIGN & TECHNOLOGY

With a rugged cast aluminum cover and back plate, wide temperature tolerance, and abuse-resistant low profile, the iDS/iNS shrugs off weather and vandalism. With no mechanical switches to fail, the ultra-reliable Hall-effect button has been tested to 20,000,000+ operations.

SIMPLE WIRELESS PROGRAMMING

The iDS/iNS is easily programmed using our industry-leading Field Service App for iOS® & Android® – no expensive software or proprietary devices required. The app not only allows technicians to configure system settings and sounds, but to access actionable data on walk intervals, activations, and more.



ENERGY EFFICIENT & COST-EFFECTIVE

Low power requirements make the iDS/iNS ideal for solar- and battery-powered installations. Combined with secure button-to-button Bluetooth® sync, this can eliminate the need for costly trenching and external radios.

PEDAPP PEDESTRIAN MOBILITY APP

PedApp allows users to interact with iDS/iNS push buttons from their smartphone. Designed for pedestrians with vision loss but usable by anyone, the app helps users identify and actuate nearby signals, as well as listen to audible messages through their phone.



iNS FEATURES - ALL MODELS

- 4 Locate Tone selectable options
- 13 Walk Sound selectable options, including 3 custom options
- 7 Clearance Sound selectable options
- Walk, Clearance, and Don't Walk sounds automatically adjust to ambient
- Separate ambient response settings for Locate Tone
- Independently set maximum and minimum volume on most sounds
- Button push confirmed by latching LED, tactile bounce, and audible "wait"
- Button vibrates during Walk
- Extended Push: optional volume boost for next Walk and Clearance
- Extended Push: optional direction of travel message
- Extended Push: activation adjustable 0-6 seconds, 0.5 second increments
- PedApp®: free mobility app allows touch-free activation via Bluetooth™, provides intersection information. Available for iOS and Android devices
- Wireless programming, custom audio, and firmware updates with the free Polara Field Service App, available for iOS and Android devices
- Built in health/event logging feature, up to 1000 events
- External speaker option at time of order
- Warranty: 3 year limited

iDETECT FEATURES

- iDetect: inconspicuous radar switch, detects movement within 20" Default setting is 1"-4"; adjustable
- iDetect: hygienic and accessible activation option
- iDetect: vandal resistant; unimpeded by fog, ice, paint, paper, smoke
- iDetect: wave time sensitivity adjustment - 0ms, 50ms, 250ms, 500ms

iNS2 / 2-WIRE FEATURES

- Operates over a single pair of wires - uses existing button wires
- All PBS wired in parallel, individually assignable to any phase
- 16 buttons can operate on a single iCCU (dependent on power requirements and wire runs)
- Central & Remote Communication via Ethernet or Wireless (Wi-Fi & Bluetooth). SNMP (email alerts) & SNTP
- Preemption message broadcasting
- All sounds are synchronized
- Extended Push Priority: mutes all but selected crosswalk, capable
- False walk detection: four independent checks

Note: An iNS2 button will automatically function as an iNS3 button when connected to an iPHCU3S. iNS3 will not operate as a 2-wire unit. See iNS3 product page for 3-wire features.

iNS/iDS SPECIFICATIONS

Operating Specifications

Parameter	Rating
Operating Temp. Range	-34°C to +74°C (-30°F to +165°F) [†]
Storage Temp. Range	-45°C to +85°C (-50°F to +185°F)
Operating Force	3.0 lbs max, option of 3 adjustable programmed forces
Switch Operating Life	Greater than 20 million operations
Max. Volume	100 dB @ 1 meter

Notes: Lab tested to applicable sections of referenced standards. All specifications are subject to change without notice. All specifications are typical unless otherwise specified.

[†]iDetect touchless actuation will work as specified in the range of -20°C to -60°C (-4°F to +140°F). Detection could fluctuate and be reduced/less responsive outside of the specified range. All normal PBS functions will work through the extended NEMA temperature ranges. iDetect is an additional feature/supplement to the PBS



▲ iCCU-S2



▲ iCCU-C2

iCCU-S2 SPECIFICATIONS

Operating Specifications

Parameter	Rating
Ped Walk/ Don't Walk Inputs:	Optically isolated 80-150 Volts AC/DC, 5 mA max.
Ped Call Outputs:	Optically isolated 36 Volts AC/DC peak 300 mA Solid State Fused Contact Closure
PBS Power Output:	Nominal 24 VDC, Short Circuit Protected Auto Recovering
General Purpose Inputs:	10-36 Volt AC/DC peak, 10 mA max, Optically Isolated
Environmental:	Operating: -34°C (-30°F) to +74°C (+165°F) LCD temperature range is limited to -20°C to +70°C Storage: -45°C (-50°F) to +85°C (+185°F)
Regulatory:	The iCCU-S2 uses a UL 62368-1 certified power supply, Certificate Number: UL-US-2135910-0
Warranty:	3 year limited

iCCU-C2 SPECIFICATIONS

Operating Specifications

Parameter	Rating
Ped Walk/ Don't Walk Inputs:	0-24 VDC (active low)
Ped Call Outputs:	Optically isolated 36 Volts AC/DC peak 300 mA Solid State Fused Contact Closure
PBS Power Output:	Up to 16 buttons can be driven under default conditions.
Environmental:	Operating: -34 C (-30 F) to +74 C (+165 F) LCD temperature range is limited to -20 C to +70 C Storage: -45 C (-50 F) to +85 C (+185 F)
Warranty:	3 year limited

Notes: The iCCU-C2 is compatible with Cal-Trans TEES and 300 series cabinets with a standard C4 connection to the output file. Preemption messaging through the APS system is not available on this unit.

Design Compliance

Functionality Test Type	Compliance
Temperature and Humidity	MUTCD 2009-4E
Transient Voltage Protection	NEMA TS2
Transient Suppression	NEMA TS2v
Mechanical Shock and Vibration	NEMA TS2
iNS3 PBS Enclosure	NEMA 250 Type 4X
Electrical Reliability	NEMA TS2