

# Caster Version 4.6

## Product Brief

Casters Version 4.6 are programmable devices of modular structure. Designed for durability and service, they maximize product lifetime and minimize maintenance cost. The two piece braking shell supports different braking surfaces for indoor and outdoor applications. Both braking shells and standard 9V alkaline batteries are easily replaceable on site to extend the life of the caster.

### EM Technology

These casters sense a magnetic field generated by the Carttronics transmitter to activate the braking shell. They implement basic cart retention with no monitoring of caster health or cart activity.

### RF Technology

An enhanced version of the EM units, RF casters use 2.4 GHz radio signals. These units communicate with in-store devices to activate their braking shell on unauthorized exits (Push-Out Prevention System). The Carttronics network collects cart location, utilization, and diagnostic information from these casters.



# Product Brief

## 4.6 Caster

The 4.6 Caster is at the core of Carttronics' Loss Prevention systems. This electronic locking caster is installed on a shopping cart or trolley and is comprised of a 2.4 GHz Radio, a sensor circuit that detects an electromagnetic signal, and a mechanism to lock the wheel. The 4.2 Caster is compatible with both the Cart Anti-theft Protection System (CAPS®) and the Push Out Prevention System (POPS™).



Within POPS™, the caster is always in one of three possible states:

- Parking Lot: The caster knows it's in the parking lot and will always get a free pass into the store.
- Shopping: When entering the store and after clearing the front entrance, the caster is now in a shopping state and must pass through a check out before exiting the store. Any caster that exits the store without passing through a check out will lock at the exit.
- Checkout: Once the caster passes through a check out, a permit is issued to the caster allowing a free pass to exit the store.

Within CAPS®, the caster will lock whenever it approaches the CAPS® antennae which is installed at the perimeter of the parking lot.

### Key Features

- Wireless connectivity to Carttronics' CAPS® and POPS™ systems
- 2-Piece removable shell for easy replacement on-site
- Flashing low battery LED light
- Water-tight electronic packaging
- Indoor or outdoor options for braking plate

### Technical Specifications

Wheel Types	Travelator, Travelator Westmont, Double Wheel Westmont, Plastic Wheel, Rubber Wheel
Yoke Stem Types	½ - 13 x 1.08", M10 x 1.50 x 29mm M12 x 1.75 x 24mm, M12 x 1.75 x 40mm
Compliance	RoHS compliant
Environmental	Storage Temperature - -20 ° to +80° C Operating Temperature: -10° to 60° C
	Relative Humidity: 90% R.H. N.C.
Certification	FCC, IC,CE,RCM
Activation	Electromagnetic
Power Source	3v Lithium
Wireless	Frequency – 2402-2480Mhz Data rate – Up to 250kbps Modulation type: FSK , MSK
Wheel Types	Travelator, Travelator Westmont, Double Wheel Westmont, Plastic Wheel, Rubber Wheel
Yoke Stem Types	½ - 13 x 1.08", M10 x 1.50 x 29mm M12 x 1.75 x 24mm, M12 x 1.75 x 40mm

## INSTRUCTION TO THE USER

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a typical installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna on the device experiencing the interference
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which this device is connected
- Consult the dealer or experienced technician for the device experiencing the interference

In order to maintain compliance with FCC regulations, no changes can be made to this equipment without the approval of Gatekeeper Systems, Inc. The user is cautioned that any changes or modifications made to the equipment without the approval of Gatekeeper Systems, Inc. could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

*Hereby, Gatekeeper Systems (HK), Ltd , declares that this **Caster Version 4.6** is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.*

*Crossed out wheeled bin symbol 126. All new EEE products must be marked with the crossed out wheeled bin symbol. In exceptional cases, where this is not possible because of the size or function of the product, the crossed out wheeled bin symbol must be printed on the packaging, the instructions for use and the accompanying warranty where applicable. This symbol aims to encourage the consumer to discard the product separately from general waste, either at the network of designated collection facilities or by returning it to a distributor who provides in-store take-back of WEEE*



## **Contacting Gatekeeper Systems**

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For more information about the Long Range Transmitter 2 and troubleshooting, to order parts or report an issue, contact the Gatekeeper Systems Inc. regional Customer Support office nearest to your location.

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