









# **HIGH-VOLUME INDUSTRIAL** TRAFFIC BARRIERS

Precision engineering, impressive speed, best performance







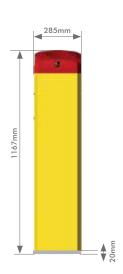


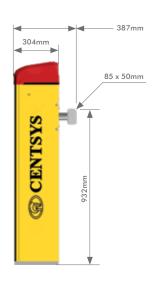
### **SECTOR II**

Introducing the heir to the throne of high-volume vehicular access control. With an updated look that perfectly matches its superior performance, an optimised design for the ultimate in ease of installation and boasting the awe-inspiring speed that made its predecessor king of the access control jungle, the **SECTOR II** is the embodiment of automation excellence.

Speed. Performance. Intelligence.
The **SECTOR II** is the benchmark against which all others are measured.

### **OVERALL DIMENSIONS**





The SECTOR II is available in three stylish and modern colour configurations to suit your aesthetic requirements. Enquire at your local CENTSYS agent.









 $\textbf{Metallic Silver}^{1,2}$ 

- 1. Special order only.
- 2. A price premium applies for the metallic finish.

#### **MAIN FEATURES**



# Rapid opening

Lots of vehicles coming in and out? You need something that goes up and down. Fast! The **SECTOR II** is ideal for high-volume applications – raising a three metre pole in under 1.2 seconds and lowering it just as guickly.



#### **Battery backup**

With our 12V battery-driven motor, your security is never compromised. The **SECTOR II** will continue to stay on, even when the power is off – beating up and down 3000 times during a 24 hour power failure before it needs a recharge. If you're expecting no power for a while, the built-in mains failure detection can be set to keep the barrier raised under power failure conditions.



### High-torque boom pole operation

The **SECTOR II**'s DC motor and reduction gearbox generate enough torque to ensure that your barrier offers the ultimate in reliability and performance. Come sunshine, rain or howling winds, you'll always be able to get in and out.



# Safe sensitivity for boom pole lowering

Your boom won't go BOOM on the roof of a visitor's car. The **SECTOR II** will detect any obstruction, so you're safe.



#### Robust, durable and slimline operator casing

Our slim **SECTOR II** looks particularly fetching – and epoxy-coating, in a highly visible 'traffic yellow', protects your investment while improved torsional rigidity makes the **SECTOR II** even stronger in windy conditions.

Available with different levels of corrosion protection for inland, coastal plains, and marine environments<sup>1</sup>.

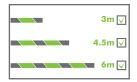
The mild steel model positively shrugs off the elements thanks to its tough pre-galvanised enclosure.

1. Refer to barrier housing specifications on the back page.



#### Easy access to electronics

It's so easy and comfortable to set up the **SECTOR II**'s many advanced features thanks to the clever, ergonomic design of the housing, with the electronic assembly at the top of the operator at the perfect working height.



#### Available in different sizes

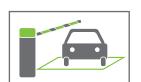
Whether closing off an entrance from as narrow as three metres to as wide as six metres, there is a **SECTOR II** model to suit. Fit the optional jack-knife and your **SECTOR II** can even be fitted in areas with limited headroom

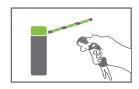


### Improved cable routing and securing for the neatest installation

Every aspect of the **SECTOR II** has been designed to streamline installation and ensure that your access control system not only works hard, but looks good, too. Tie strap sockets have been provided on both the cabinet and the electronics tray, with cable routing down the front flange of the cabinet, resulting in an installation that's as neat and tidy as an officer in uniform.







# **Comprehensive input and output**

With our intuitive, user-friendly LCD interface, setting up the **SECTOR II** is not just simple – it's child's play. Set the **SECTOR II** to handle any vehicle access control application with the touch of a button. To make things even easier, our state-of-the-art motor controller not only ensures smooth and reliable operation, it allows you to set your boom's opening and closing speed to your liking.

# **Onboard loop detector support**

If you'd like to fit an additional loop, simply clip a CENTSYS standalone loop detector into the convenient custom bracket or connect the loops and you're good to go!

# Operate wirelessly, thanks to CENTSYS<sup>2</sup>

Besides its code-hopping technology offering the highest level of remote control security, the CENTSYS onboard receiver is both multichannel and multi-user, allowing a multi-button remote to operate any combination of the system inputs, such as Barrier Raise, Barrier Lower, etc. It stores up to 500 transmitter buttons, and amongst other access control features, it provides the ability to selectively add and delete transmitter buttons saved into its memory.

2. CENTSYS code-hopping

### **SECTOR II CONTROLLER FEATURES**

#### Hardware features

- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- · Easy setup of controller using LCD user interface
- · Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller
- Optional Backup Memory Module allows backing up of all the information that has been set up in the system
- The SECTOR II is available in three stylish and modern colour configurations to suit your aesthetic requirements. Enquire at your local CENTSYS agent
- Electronics reside at top of enclosure for easy access

### **Electronic features**

- Barrier raise and lower inputs
- Memory and non-memory barrier activation
- Onboard multichannel CENTSYS code-hopping receiver with the ability to:
  - Learn transmitter buttons to specific functions (e.g. Barrier Raise, Barrier Lower, etc.)
  - Selectively delete specific transmitters that have been lost or stolen
  - Automatically learn transmitters (Autolearn) and automatically delete transmitters that are no longer in use (Delete-Not-Present)
- Full configuration of barrier operating parameters including independent pole raise and lowering speeds, ramp-up and ramp-down angles
- Automatic closing
- Multiple Operating Profiles to suit region select between ZA, CE, etc.
- · Multichannel controller with integrated ChronoGuard timer technology (a world first)
- Free-exit facility1
- Remote boom pole status indicator<sup>2</sup> (pole position, power failure, low battery, multiple collision detection and security light status indication)
- Courtesy / Pillar Light Timer with adjustable duration<sup>3</sup>
- Fully configurable pre-delays with multi-modal pre-flash4
- Safety / Closing beam input with beam functional test<sup>5</sup>
- Lock / Emergency stop input<sup>6</sup>
- Ticket Vend Interlock<sup>7</sup>
- 1. Inductive loop detector or infrared beams must be fitted
- 2. Remote LED must be fitted
- 3. An external pillar light must be connected to enable this feature
- 4. An external light must be connected to enable this feature

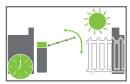
- 5. Infrared safety beams or equivalent detection device must be fitted
- 6. To use this feature, a normally closed emergency stop pushbutton must be fitted
- 7. This feature enables connectivity to a ticket vending machine

### **CHRONOGUARD TIMER TECHNOLOGY (a world first)**

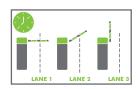
The SECTOR II is so advanced it takes access control at the traffic barrier entrance to the next level.

With CENTSYS' ChronoGuard timer technology onboard, any of the SECTOR II's inputs that activate the barrier can be set to operate automatically or be time-barred at any time you choose. Its built-in Real Time Clock and Calendar timer allows you to set up different exclusions, which can cater for public holidays, special Time-periods, etc.





Very often, traffic barriers are used in conjunction with motorised gates at the entrances to business parks, housing estates, etc. The traffic barrier controls access during the day when traffic volumes are high, while the gate is used at night when greater security is required. ChronoGuard can now be used to automatically switch operation from the SECTOR II to the gate motor as and when required. Security has never been this convenient.



To increase security and control traffic flow you can automatically shut down certain traffic lanes controlled by the SECTOR II at quieter times of the day, or over weekends and on holidays.



ChronoGuard gives you the ability to time-bar transmitters that have been learned into the system. This gives you the flexibility to control when your barrier can be opened by specific transmitter holders. For example, staff may be given access to the office park during the week, but on weekends you may wish to limit their access to the property.

ChronoGuard technology allows for almost unlimited temporal functionality, all of which is very simply set up on the controller via the intuitive menu system and LCD user interface. The following functionality is available:

- Time-activate many of the physical inputs and outputs of the controller (see table below)
- Time-bar many of the physical inputs and outputs of the controller, as well as particular remote buttons learned into the onboard receiver (see table below)
- The Real Time Clock and Calendar timer has the following flexibility:
  - It supports 100 Time-periods, that may be set according to:
    - Weekdays (M + T + W + T + F)
    - Weekends (S + S)
  - Special calendar events (family holiday, etc.) occurring on any date until the year 2100
  - Annual calendar events (New Year's Day, etc.)
  - Allows for multiple Time-periods to be set during a 24-hour period
- The Real Time Clock and Calendar timer is backed up for at least one hour to maintain the current time and date in the event that all power is removed from the controller

	Physical inputs					Physical outputs		
	MI: Memory input	NMI: Non-memory input	Raise: Barrier raise	Lower: Barrier lower	Lck/Stp: Holiday Lockout	ILP: Inductive loop detector	Aux IO: Auxiliary output	Aux IO: Auxiliary input/ouput
Time-activate	×	×	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Time-bar	PHYS 😜	PHYS 😜	PHYS 🟮	PHYS 😜	PHYS ᇦ	PHYS 🟮	PHYS <b></b>	PHYS 😜
	<b>✓</b> ✓	<b>✓</b> ✓	<b>✓</b> ✓	<b>✓</b> ✓	<b>✓</b> ✓	××	××	××

Aux IO - open collector output that can be used to drive an external relay for operating any external device, eg. water feature, security lights, etc.

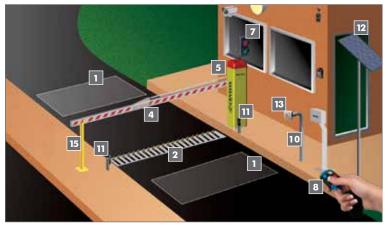
physical connection to an external device, eg. Inductive Loop Detector, SMARTGUARD keypad, etc



interfaces with onboard CENTSYS code-hopping receiver



#### **ACCESSORIES**





FLUX 12-24V DC

Required to enable the free-exit facility or the closing/safety loop facility - ground loop to be fitted



CLAWS

Add real security with seamless integration to our **SECTOR II**. Four different configurations



TRAPEX

A traffic barrier pedestrian fence that stops people from circumventing the SECTOR II access control point (not shown in diagram)



Jack-knife Assembly

Accommodates applications limited headroom



**Rectangular Coupling**Providing a secure and reliable means of joining the rectangular boom pole to the SECTOR II



Rectangular Breakaway Coupling

Pole hinges away from barrier if accidentally knocked reducing the chance of it being damaged



MIDI Traffic Light

Visually indicate when it is safe for a vehicle to proceed into or out of an access controlled area



**CENTSYS Transmitters** 

Available in one-, two-, and four-button variants. Incorporat code-hopping encryption



**Backup Memory Module** 

(not shown in diagram)

Back up all the transmitters an operating details set up in the controller

(not shown in diggram)



Gooseneck

Steel pole for mounting interc gate station or access control inting intercom reader

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**CENTSYS Infrared Beams** 

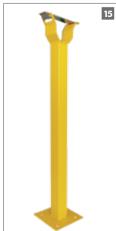
Always recommended on an gate automation installation



**Solar Supply** 

Alternative means of pow the system - consult your CENTSYS dealer ns of powering





applications where the roadway is particularly wide and requires a boom that covers the entire width of the roadway (not shown in diagram)



**Manual Pushbutton** 

Industrially-rated switch, typically for a guard to manually activate the barrier

Rectangular Boom Pole

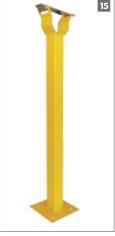
Shroud
Designed to enhance the barrier's aesthetics and make the appearance more sophisticated and streamlined by concealing mechanical parts

(not shown in diagram)



LED Kit

A simple and effective accessory for traffic barriers, featuring an LED strip that can be easily affixed to a rectangular boom pole. When integrated with the barrier logic, the LED Kit provides a clear indication to drivers when it is safe to proceed (not shown in diagram)



Catchpost

Allows locking the boom pole in the lowered position -recommended with 6m boom poles to support pole tip and prevent drooping due to flexure in the pole

#### **TECHNICAL SPECIFICATIONS**

Technical Data	SECTOR II 3	SECTOR II 4.5	SECTOR II 6	
Input Voltage <sup>1</sup>	220V AC +/-10% @ 50Hz			
Motor Voltage	12V DC			
Motor Power Supply <sup>2</sup>	Battery driven (standard capacity - 7Ah)			
Battery Charger	CP84SM – 1.8A @ 13.7 +/-1%			
Current Consumption (mains supply)	170mA			
Current Consumption (motor rated / peak load)	1/12 A			
Current Consumption (quiescent load)	75mA			
Boom Pole Length <sup>3</sup>	3.0m	4.5m	6.0m	
Boom Pole Raise Time	1.2 sec 3 sec			
Maximum daily cycles	3 000 cycles/day			
Design Life <sup>4</sup>	2 000 000 cycles	1 800 000 cycles	1 500 000 cycles	
Operations in standby mode with standard battery	3000			
Half Day <sup>5</sup>	3 000 cycles 2 900 cycles			
Full Day <sup>5</sup>	3 000 cycles 2 300 cycles		cycles	
Collision Sensing	electronic			
Operating Temperature	-15°C to +50°C			
Degree of Protection	IP54			
Controller incorporated	S-Series_12			
Onboard Receiver Type	NOVA code-hopping onboard multichannel			
Receiver frequency	433MHz			
Receiver code storage capacity	500 Buttons			
Mass of unit packed	44kg	47.5kg	52kg	
Packing Dimensions	Length: 440mm	Width: 350mm F	leight: 1250mm	

- Can operate off a solar supply, consult CENTSYS for assistance
   Can increase battery capacity for longer standby times
   Boom pole raise and lower times are both individually configurable to suit individual installation requirements
   Based on basic operator excluding closing loop detector
   Limited by daily usage

# **BARRIER HOUSING SPECIFICATIONS**

	SECTOR II Grade 430	SECTOR II Grade 316	
Application	Coastal plains - no airborne salt	Marine areas	
Housing construction	Sheet metal housing, 1.6mm wall thickness with separt fabricated base frame, 3mm wall thickness to raise hous above ground. Separate fabricated sheet metal door w 1.2mm wall thickness.  Die-Cast Grade LM24 Aluminium Cover with condensation shield		
Barrier housing surface protection	Grade 430 stainless steel with powder coating	Grade 316 stainless steel, brushed finish	
Base frame surface protection	Mild steel hot dip galvanised	Grade 316 stainless steel	
Housing colour	Cover: Red Main Body: Traffic Yellow		

# **BOOM POLE SPECIFICATIONS**

Material and profile	Aluminium, rectangular profile with plastic end cap		
Surface protection	Powder coating		
Colour and markings	White with red and white reflective tape		
Weight	1060g/metre		
Dimensions	85mm x 50mm x 1.5mm wall thickness (excl. bumper)		
Bumper material	PMMA, white		

# **DUTY CYCLE**

