ELSEMA

GATE & DOOR CONTROLS

2022 / 2023 Catalogue

ELSEMA

WIRELESS COMMUNICATIONS

Automatic Gate and Wireless Technology

Since 1978 we have been in research and development of automatic gates and wireless communications. We are passionate about our work and products supplying innovative solutions to the gate and door automation industry.

The complete production cycle is done by Elsema – from concept, design, testing, assembly, packaging to final quality checks.

Our team strives to put customer service first and use intelligent solutions for our products. We are here for our customers, real people answer the phones and we have specialised engineers who give technical support.

Elsema's 1 year warranty is a clear statement to its customers that the highest possible standard has been used in sourcing components, manufacturing and design of its products.

Our exclusive lifetime support on components and technical advice guarantees that we are there to service the product long after the sale. The lifetime support on components is for 12 years after the purchase date.

PRODUCT SPOTLIGHT

Waterproof Keyring Remote

PentaFOB® Series

Long Distance Transmitter

FMT151 Series

ELSEMA INTELLIGENT SLIDER®

Industrial Sliding Gate Kits

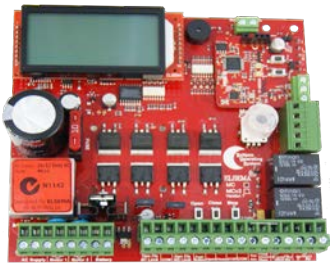
Varible Speed Drive Control Box

Domestic Sliding Gate Kits

ELSEMA INTELLIGENT SWING®

Domestic & Industrial Swing Gate Kits

Automatic Gate Controls



Eclipse® Control Card

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Automatic Gate & Door Technology

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Quick Selection Guide

Domestic Sliding Gate Motor

Powered by Eclipse Operating System

ELSEMA INTELLIGENT SLIDER®

Part Number	iS600	iS900	iS900B	iS900Solar
Input Supply	240 Volts AC	240 Volts AC	240 Volts AC	24V Solar Panel
Motor Voltage	24 Volts DC	24 Volts DC	24 Volts DC	24 Volts DC
Soft Start Soft Stop	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□
Maximum Gate Weight	600kg	900kg	900kg	900kg
Motor Size	80 Watts	120 Watts	120 Watts	120 Watts
Solar / Battery Backup Option			powered by Li-Ion technology	+ powered by Li-Ion technology Included in the kit
Gate Speed	250mm/sec	250mm/sec	250mm/sec	250mm/sec

Quick Selection Guide
Industrial Sliding Gate Motor

Powered by Eclipse Operating System

ELSEMA INTELLIGENT SLIDER®

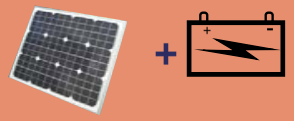
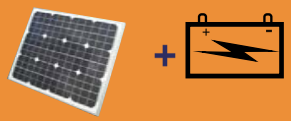
Part Number	iS1500	iS1500LV	iS2000	iS3000
Input Supply	240 Volts AC	240 Volts AC	240 Volts AC	24V Solar Panel
Motor Voltage	240 Volts AC	24 Volts DC	240 Volts AC	240 Volts AC
Soft Start Soft Stop	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□
Maximum Gate Weight	1,200kg	1,200kg	2,000kg	3,000kg
Motor Size	250 Watts	250 Watts	750 Watts	1100 Watts
Battery Backup Option		Backup Battery Included in the Kit		
Gate Speed	450mm/sec	367mm/sec	633mm/sec	315mm/sec

Quick Selection Guide

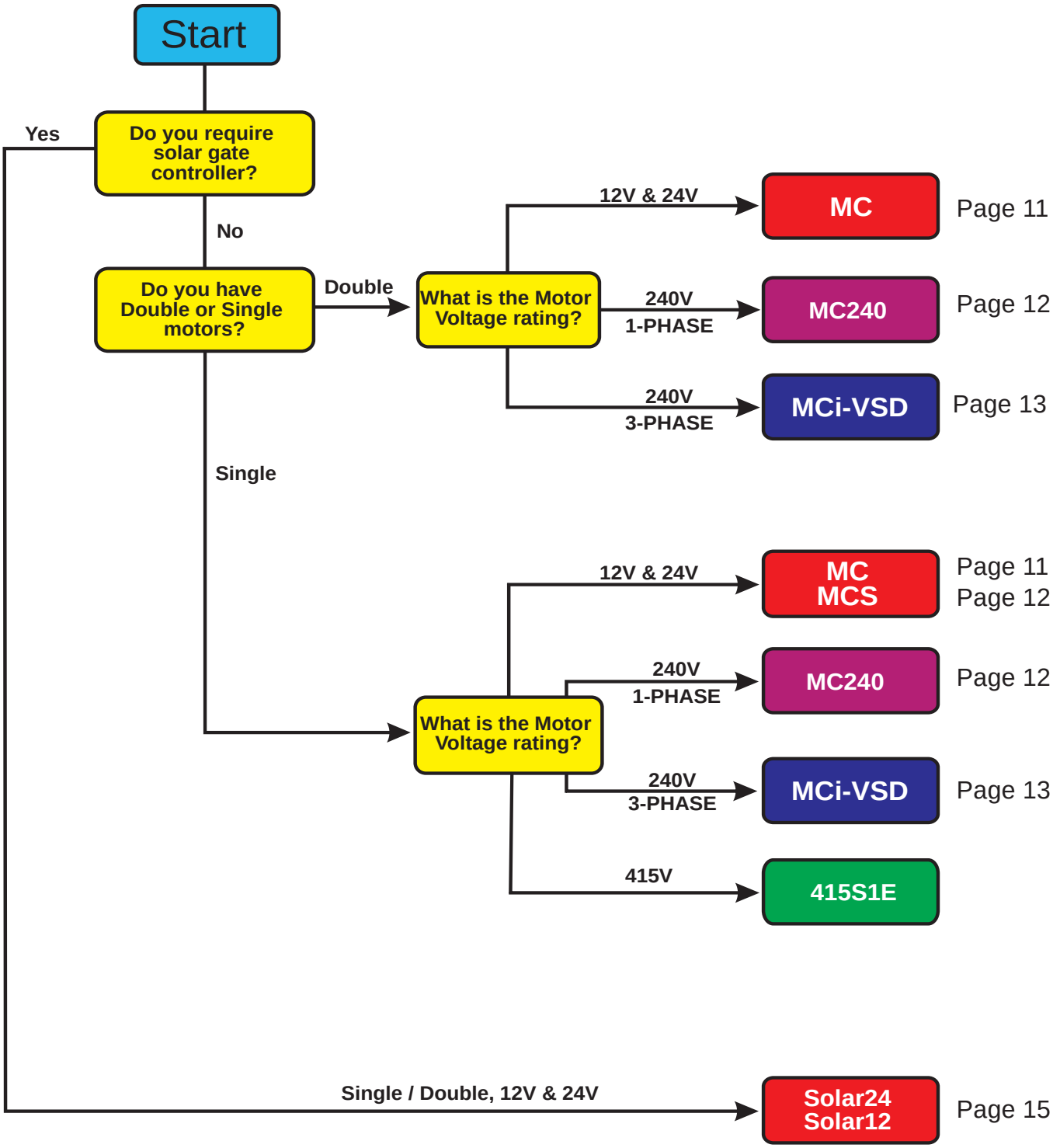
Swing Gate Motor

Powered by Eclipse Operating System

ELSEMA INTELLIGENT SWING

	Domestic	Domestic / Commercial	Industrial	Domestic
Part Number	**iS260D**	**iS400D**	**iS330D**	**iS270D**
Input Supply	240 Volts AC	240 Volts AC	240 Volts AC	240 Volts AC
Motor Voltage	24 Volts DC	24 Volts DC	240 Volts AC	24 Volts DC
Soft Start Soft Stop	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□
Maximum Gate Size	2.5 metres	4.5 metres	6 metres	2.5 metres
Motor Type	Worm Drive 	Worm Drive 	Hydraulic 	Articulated Arm 
Solar / Battery Backup Option			 Uninterruptible Power Supply (UPS)	
Day & Night Sensor	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□	User Adjustable ■■■□□□

Gate Controller Selection Guide



Domestic Sliding Gate Kits

ELSEMA INTELLIGENT SLIDER®

- Self learning using intelligent positioning technology
- High capacity Lithium-Ion battery backup optional
- Easy installation with Eclipse® control card
- Powerful 120 Watt motor for faster speed
- All metal gearbox for longer life
- Suitable for gates up to 900kg on level ground
- Contactless limit switch
- Soft start and soft stop
- Designed by Elsema in Australia

iS600 & iS900 kits include 3 PentaFOB® remotes, 4 metres of gear rack and a photo electric beam.

iS900B kit includes Li-Ion battery backup, 3 PentaFOB® remotes, 4 metres of gear rack and a photo electric beam.

iS900Solar kit includes a smart ultra-fast MPPT solar charger, Li-Ion battery, a single 24V solar panel, 3 PentaFOB® remotes, 4 metres of gear rack and a photo electric beam.

The iS900Solar24 kit uses the latest Bluetooth Smart technology with ultra-fast MPPT charging. The mobile phone app shows the battery status in real time, charging current, voltage and the output of the solar panel.

iS600

iS900

iS900B

Solar Powered

Monitoring APP.
Search for VictronConnect
in App store

iS900Solar

TECHNICAL DATA

Model	iS600	iS900	iS900B	iS900Solar
Motor Size	80W	120W	120W	120W
Motor voltage	24 Volts DC	24 Volts DC	24 Volts DC	24 Volts DC
Gate weight (Level ground)	600kg	900kg	900kg	900kg
Gate Speed	250mm/sec	250mm/sec	250mm/sec	250mm/sec
Input Power	240V 10Amps	240V 10Amps	240V 10Amps	**Solar Panel**
Duty cycle	60% over 12 min	60% over 12 min	60% over 12 min	-
Backup battery	-	-	**Lithium-Ion**	**Lithium-Ion**

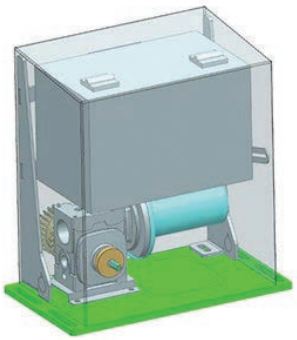
Industrial Sliding Gate Kits

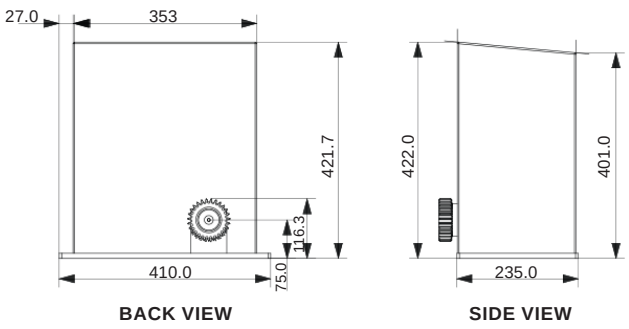
- No restriction on gate length
- Smart contact-less dual limit switch
- Easy installation with Eclipse® control card
- Designed in Australia
- Slow limit and stop limit
- Soft start and soft stop
- Powder coated industrial cover

ELSEMA INTELLIGENT SLIDER®

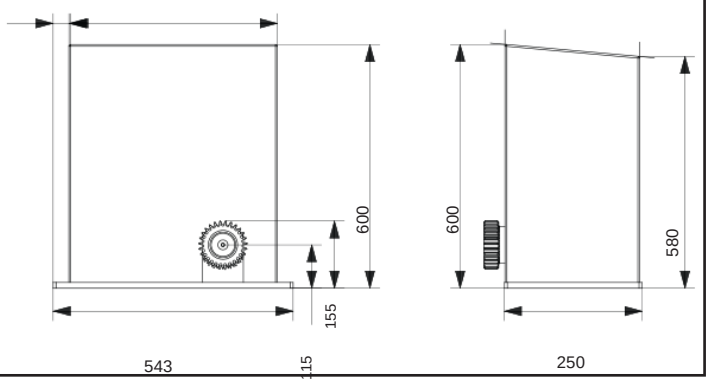
Dimensions

iS1500





iS2000, iS3000/iS1500LV



SLIDING GATE KITS

iS1500

TECHNICAL DATA

Motor size	250W
Motor voltage	240 Volts AC
Max gate weight	1,200kg
Gate speed	450mm/sec

iS1500LV
with backup battery

TECHNICAL DATA

Motor size	250W
Motor voltage	24 Volts DC
Max gate weight	1,200kg
Gate speed	367mm/sec

iS2000

TECHNICAL DATA

Motor size	750W
Motor voltage	240 Volts AC
Max gate weight	2,000kg
Gate speed	633mm/sec

iS3000

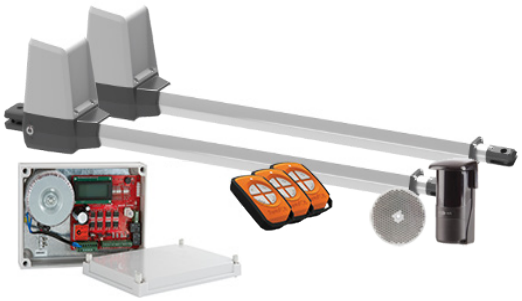
TECHNICAL DATA

Motor size	1100W
Motor voltage	240 Volts AC
Max gate weight	3,000kg
Gate speed	315mm/sec

Swing Gate Motor Kits

DOMESTIC SWING GATE MOTOR KITS

ELSEMA INTELLIGENT SWING®



iS260 (Single Kit)
iS260D (Double Kit)

TECHNICAL DATA

Power supply	240 Volts AC
Motor voltage	24 Volts DC
Max gate weight	200kg
Max gate length	2.5 metres

SWING GATE KITS

Articulated Arm Motor

iS270 (Single Kit)
iS270D (Double Kit)

TECHNICAL DATA

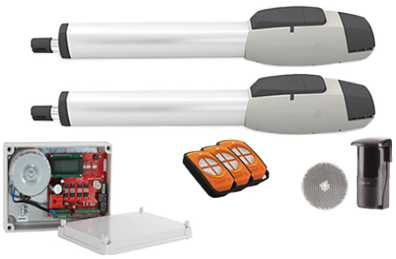
Power supply	240 Volts AC
Motor voltage	24 Volts DC
Max gate weight	250kg
Max gate length	2.5 metres

iS270Solar (Single Kit)
iS270DSolar (Double Kit)

TECHNICAL DATA

Power supply	Solar
Motor voltage	24 Volts DC
Max gate weight	250kg
Max gate length	2.5 metres

RESIDENTIAL SWING GATE MOTOR KITS



iS400 (Single Kit)
iS400D (Double Kit)

TECHNICAL DATA

Power supply	240 Volts AC
Motor voltage	24 Volts DC
Max gate weight	400kg
Max gate length	4.5 metres

iS400Solar (Single Kit)
iS400DSolar (Double Kit)

TECHNICAL DATA

Power supply	Solar
Motor voltage	24 Volts DC
Max gate weight	400kg
Max gate length	4.5 metres

INDUSTRIAL HYDRAULIC SWING GATES MOTOR KITS

iS330 (Single Kit)
iS330D (Double Kit)

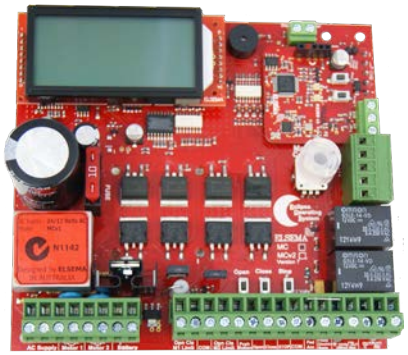
TECHNICAL DATA

Power supply	240 Volts AC
Motor voltage	240 Volts AC
Max gate weight	600kg
Max gate length	6 metres

MC Series with Eclipse ®

12 or 24V Control Card for Double or Single Gate

MC
140 x 130 mm



MC24E
or
MC12E

FEATURES

- Suitable for swing and sliding gates
- Double or single motor operation
- Motor soft start and soft stop
- Speed and force adjustment
- 1-Touch control for easy setup
- Supports limit switch inputs or mechanical stops
- Energy saving mode to reduce running costs
- Service counters, password protection, holiday mode and many more features
- Built-in 12 and 24 Volt battery charger for backup batteries (MC & MCS)
- Low standby current making it ideal for solar gates

MC SERIES

DESCRIPTION

Are you ready for the next Eclipse? The MC is not just the next generation but the “Next Transformation” in the gate and door industry creating an Eclipse over previously developed motor controllers.

This new intelligent motor controller is the best match for your automatic gate or door motors.

The intelligent controller was built from the ground up, based on customer feedback and using today’s technology.

Elsema’s easy options to add remote controls or any type of photoelectric beams makes for a very user friendly approach, while avoiding the lock down approach to accessories.

The control cards are available with an IP66 rated plastic enclosure for outdoor installations, backup batteries with charger or the card only. The MC is also suitable for solar gates as it has very low standby current.

Part No.	Contents
MC	Double or single gate and door controller for 24 / 12 Volt motor up to 120 Watts
MC24E	Double or single controller for 24 Volt motors includes IP66 rated plastic enclosure and transformer
MC24E2	Same as MC24E plus 24 Volt 2.3Ah backup battery
MC24E7	Same as MC24E plus 24 Volt 7.0Ah backup battery
Solar Gates	
Solar24SP	Solar kit for double or single gates, includes solar MPPT charger & 24 Volt 15.0Ah backup battery and a 40W solar panel.

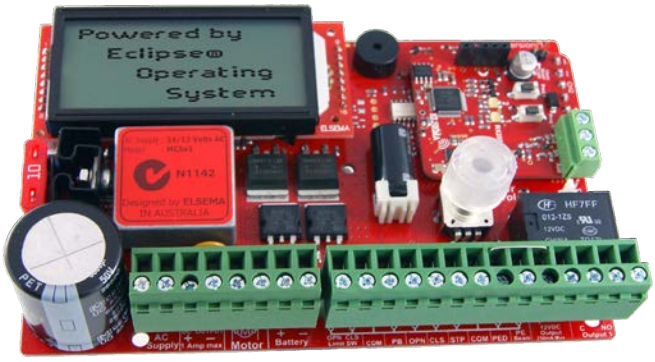
Part No.	Contents
MCv2	Double or single gate and door controller for 24 / 12 Volt motor bigger than 120 Watts
MC12E	Double or single controller for 12 Volt motors includes IP66 rated plastic enclosure and transformer
MC12E2	Same as MC12E plus 12 Volt 2.3Ah backup battery
MC12E7	Same as MC12E plus 12 Volt 7.0Ah backup battery
Solar12	Solar kit for double or single gates, includes solar MPPT charger & 12 Volt 15.0Ah backup battery

MC is suitable for motors up to 120 Watts. Above 120 Watts use MCv2.

MC & MCv2 control card can be used to control automatic gates, doors, boom gates, automated windows & louvres.

12 or 24V Control Card for Single Gate

with Eclipse® Operating System (EOS)

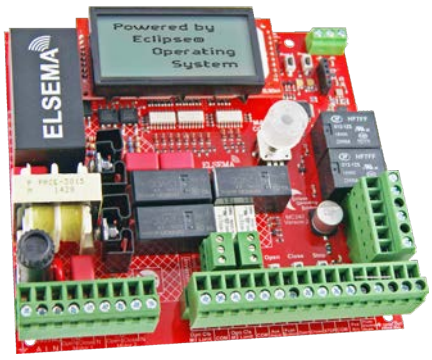


Part No.	Description
MCS	Single gate and door controller for 24 / 12 Volt motor up to 120 Watts
Dimension	140 x 90 mm

Part No.	Description
MCSv2	Single gate and door controller for 24 / 12 Volt motor above 120 Watts
Dimension	140 x 90 mm

240VAC Control Card for Double or Single Gate

with Eclipse® Operating System (EOS)



Part No.	Description
MC240	Double or Single gate and door controller for 240 Volt AC motor
Dimension	140 x 130 mm

Part No.	Description
MC240E	MC240 Control card enclosed in a case
Dimension	250 x 175 x 75 mm

MCi-VSD with Eclipse ®

Gate and Door Controlller with VSD (Variable Speed Drive)

MCi-VSD04

Optional external Push Buttons can be installed on request

FEATURES

- Designed for 240VAC, 3-phase motors
- Durable metal enclosure
- Double or Single motor operation
- Eclipse Operating System (EOS)
- Motor soft start and soft stop
- Instant stop on obstruction
- 1-Touch control for easy setup
- Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- Variable photoelectric safety beam functions
- Service counters, password protection, holiday mode and many more features

DESCRIPTION

The MCi Controller has been specifically designed to control Variable Speed Drives (VSD). Elsema's MCi-VSD kit comes with its own Omron VSD for controlling a 3-phase 240 Volt AC motor. There are 4 different kits available for different motor sizes.

The MCi card only version can also be used to control almost all types of VSD's or even contactors. The relay outputs on the MCi are voltage free contacts, allowing the user to connect it to VSD's Open, Close & Common inputs (Forward, Reverse & Common). It can also be used to operate coils of open and close contactors.

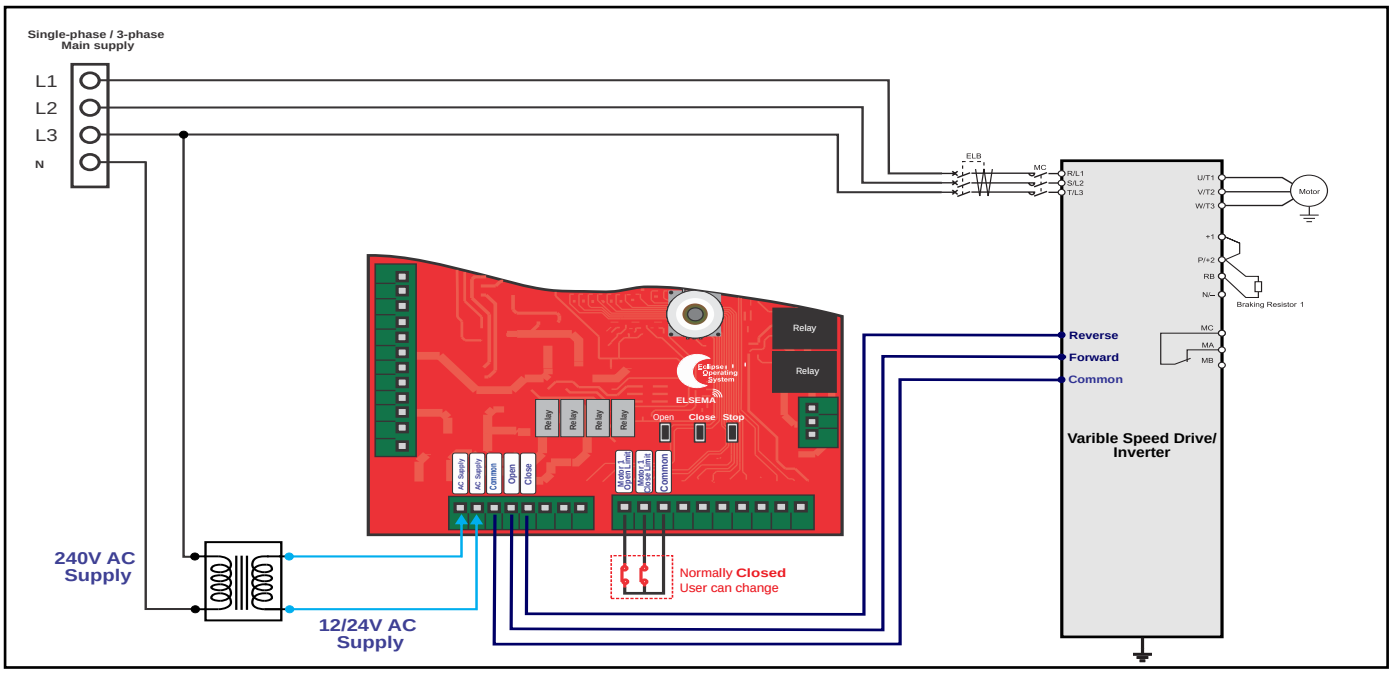
The MCi-VSD kit with Eclipse® Operating System (EOS) automatically does all the confusing and hard to find VSD parameters settings by simply asking the user a few questions. It also gives the user options for more advance settings, where the user can configure each parameter of the VSD. All selections are done in the EOS menu instead of the VSD.

For detailed technical data visit: www.elsema.com

Part Number	Description	Dimension
MCi-VSD04	Suitable for 0.4kW (1/2hp) motor	300x300x150mm
MCi-VSD07	Suitable for 0.75kW (1hp) motor	400x300x200mm
MCi-VSD15	Suitable for 1.5kW (2hp) motor	400x300x200mm
MCi-VSD22	Suitable for 2.2kW (3hp) motor	400x300x200mm

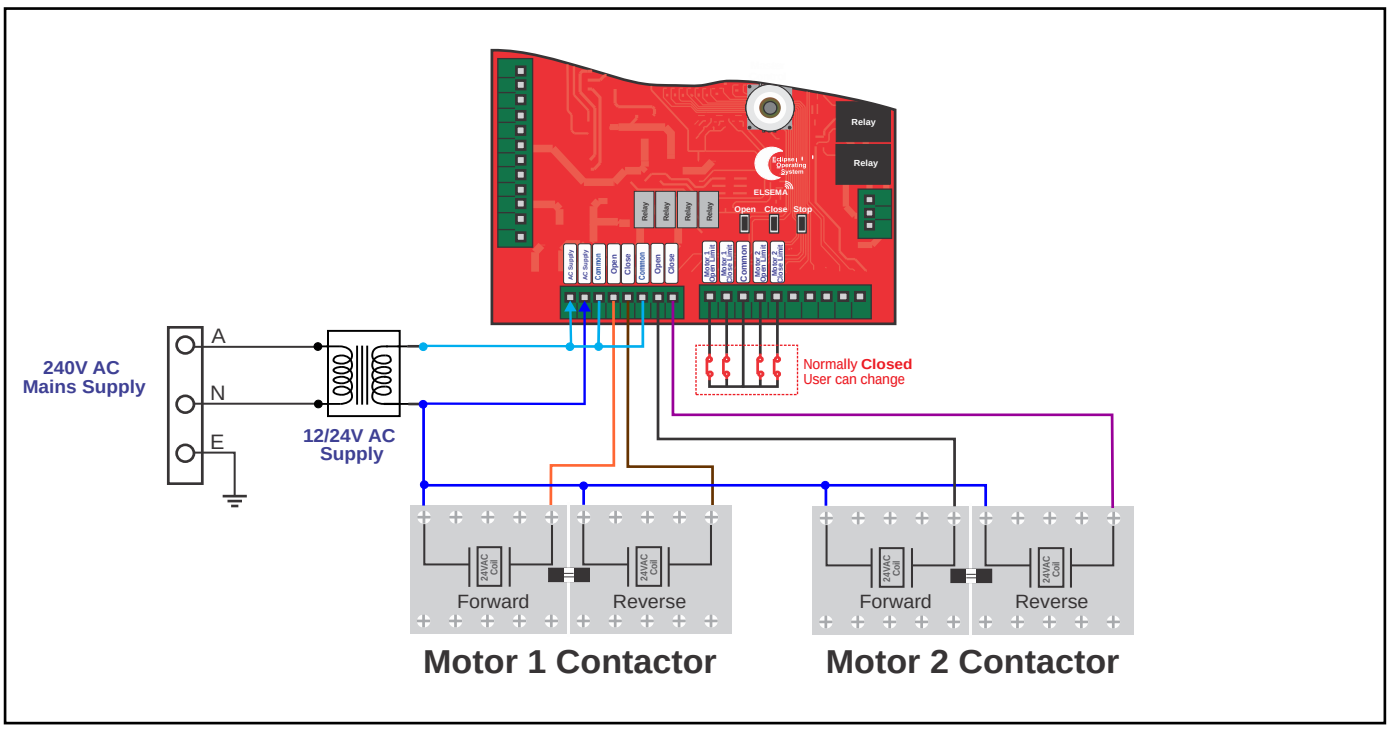
VARIBLE SPEED DRIVE OUTPUT

The Voltage Free outputs are connected to a VSD as shown in the diagram. If 2 VSD's are used, use the VSD 2 output to connect to the second VSD.



Connecting Contactors

Voltage Free outputs for motor 1 and motor 2 can also be used to control low voltage contactors. See connection diagram below.



Solar Kits for Single & Double Gate

DESCRIPTION

With solar gate kits there is no need to run mains power down to your gates, the gates are powered by solar energy. Elsema's 24 Volt solar kit **(Solar24SP)** comes with a single 24 Volt, 40 watt solar panel and 2 deep cycle 15Ah batteries.

Our kits are assembled and designed in Australia. With the use of a weatherproof case, deep cycle batteries and the intelligent control card, the kits will give you many years of reliable and secure use.

24 Volt Solar Kit

40W Solar panel is included

Part Number	Solar24SP
Battery	Deep Cycle 15Ah
Solar Panel	40 Watts included
Dimension	340 x 280 x 130 mm

12 Volt Solar Kit

Solar panel is not included

Part Number	Solar12
Battery	Deep Cycle 15Ah
Solar Panel	Minimum 40 Watts
Dimension	280 x 280 x 130 mm

Download App to see Real-time battery charging data, battery health, solar panel output, charging history and more.

***Smart charger has been optimised for the batteries which are supplied with it. Do not change any settings!**

ANDROID APP ON Google play

Available on the App Store

Search for VictronConnect in App store

FREQUENTLY ASKED QUESTIONS

- ***Are deep cycle batteries used?*** For solar gate automation deep cycle batteries must be used.
- ***What is the size of the battery?*** Larger batteries (Higher Ah) will allow more accessories and longer operation before the next charge. This is specified as the Ampere-hour (Ah) of the battery.
- ***What is the stand-by current drain of the control card used in the solar kits?*** The lower the current the better it is since your gates will operate longer with the solar energy. Stand-by currents are usually less than 30mA. Higher stand-by currents will consume more power from your batteries, reducing the solar energy stored.
- ***Where was the control card designed?*** Elsema's control cards are designed in Australia for the Australian conditions. Most of the other control cards on the market are imported from Asia and Europe and are not suitable for the Australian conditions.
- ***What is the size of the solar panel?*** For gate or door automation a minimum 40 watt panel is recommended. The size will depend on many factors. You can call Elsema's solar engineer who will guide you to the correct size.

Waterproof PentaFOB® Series

FEATURES

- Waterproof Keyring transmitters (IP67)
- Option of 1, 2, 4 or 5 channels
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Complies to AS/NZS 4268, CE and FCC
- Works with all PCR Penta series of receivers

DESCRIPTION

The Waterproof PentaFOB® works in conjunction with our standard PentaFOB® remotes and PCR series of receivers. It uses frequency hopping spread spectrum (FHSS). This means that when a button is pressed, it simultaneously transmits the encrypted code on five different frequencies. This makes it impossible for your remote control to be interfered with or jammed.

Available in 1, 2, 4 and 5 button configurations. The keyring retainer is moulded as part of the chassis making for a super sturdy keyring mount.

The PentaFOB® series is an extremely versatile remote control that can be customized through a range of configurations and colours to suit your needs.

TECHNICAL DATA

Over 17 billion encrypted codes
Operating range of up to 100 metres depending on building structure and receiver antenna
18mA (typical) at 3 Volts DC supply during transmission
Battery life of 2 years with average use
Frequency Band: 433.100 to 434.700 MHz
Custom front design available

PentaFOB® Series

FEATURES

- Keyring transmitter with 1, 2, 4 or 5 channels
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Competitive pricing
- Complies to AS/NZS 4268, CE and FCC
- Works with all PCR Penta series of receivers

The PentaFOB® is an extremely versatile remote control that can be customized through a range or configurations and colours to suit your needs.

DESCRIPTION

The PentaFOB® uses frequency hopping spread spectrum (FHSS). This means that when a button is pressed, it simultaneously transmits the encrypted code on five different frequencies. This makes it impossible for your remote control to be interfered with or jammed.

Available in 1, 2, 4 and 5 button configurations. The keyring retainer is moulded as part of the chassis using reinforced nylon making for a super sturdy keyring mount.

The PentaFOB® series is an extremely versatile remote control that can be customized through a range of configurations and colours to suit your needs.

Case Black Upper Orange | Case Black Upper Blue | Case Black Upper Red | Case Black Upper Green | Case Black Upper Black

Choose from a range of colour options. Mix and match!
If you require a custom Pantone® colour please contact us for more information

PentaCODE® Series

FEATURES

- Keyring transmitter with 2 or 4 channels
- Dual Coding System simultaneously transmits the code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Complies to AS/NZS 4268, CE and FCC
- Competitive pricing
- Works with all PCR Penta series of receivers

DESCRIPTION

The PentaCODE® dual coding system gives the installer the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes.

With the 12-way dip switch, just match the keyring remotes and the receiver's dip switch and it's coded.

With the encrypted code you switch all the 12-way dip switches OFF and the remote and receiver automatically goes into the encrypted coding.

The PentaCODE® remotes, when used in encrypted mode, can be programmed from another working remote.

TECHNICAL DATA

12-way dip switch coding or one of over 17 billion encrypted codes
Option of 2 or 4 buttons
Operating range of up to 200 metres depending on building structure and receiver antenna
18mA (typical) at 12 Volts DC supply during transmission
Battery life of 1.5 years with average use
Frequency Band: 433.100 to 434.700 MHz
Custom print available for front labels

Photoelectric Beams

DESCRIPTION

The photoelectric beam works with any Elsema type automatic gate or door controller cards used on sliding, swing or roller doors. It is usually used as a safety device to control automatic gates and doors.

For detailed technical data visit www.elsema.com/automatic-gates/photocell

PE1500

Long Range Retro reflective type photoelectric beam with Polarised Polycarbonate case

Type	Polarised retro reflective type
Supply	12-250 Volts AC/DC
Sensing Range	10 metres

PE24

12-24 Volts AC/DC Through beam type

Type	Through beam type
Supply	12-24 Volts AC/DC
Sensing Range	10 metres (Outdoor)
	30 metres (Indoor)

Wireless Keypad

FEATURES

- IP54 rated
- Built in buzzer
- CR2450 Battery
- Easy programming
- Keypad has a backlight
- PIN length up to 8 digits
- 433MHz operating frequency
- Average service life of 2 years with 10 transmissions a day

DESCRIPTION

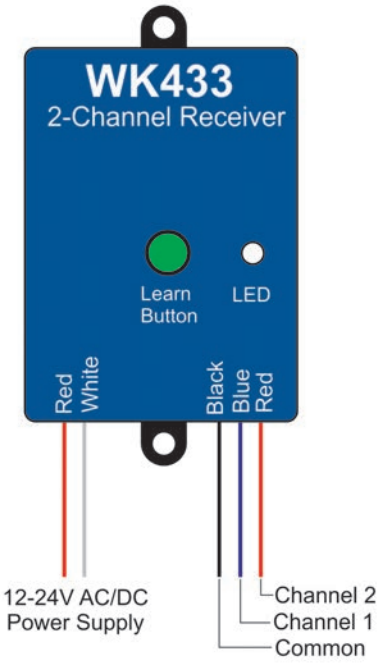
The WK433 is a battery powered wireless keypad. It is a 2-channel transmitter, which transmits a signal to the receiver when the correct code is typed. Both channels have the same code.

The Keypad is suitable for mounting either indoor or outdoor under cover

It is an ideal choice for gate and door access for homes, shops, factories, warehouses, laboratories, banks and prisons.

TECHNICAL DATA

Keypad Supply: CR2450 Battery
Receiver Supply: 12-24V AC or DC
Output: Changeover Relay output
Operating Frequency: 433.920MHz



Vehicle Loop Detectors

DESCRIPTION

An inductive loop detector is used to detect motor vehicles. When the motor vehicle drives over the in-ground loop, the detector senses the metal and activates a relay. This relay is connected to the motor controller card to automatically open the gate or door. Elsema sells high and medium sensitivity detectors with 1 or relay output.

LD40 is a high sensitive detector ideal for industrial/commercial applications.

LD40

Sensitivity	High
Supply	12-24 Volts AC/DC
Output	Single relay output

MD2010 is a medium sensitive detector ideal for domestic applications.

MD2010

Sensitivity	Medium
Supply	12-24 Volts AC/DC
Output	Single relay output

Direct Burial Loops

DESCRIPTION

Used for installations under concrete, asphalt, pavers, or in gravel roads. The most common installation is the loop tied directly to the rebar before concrete is poured. Wire is designed for a direct burial application.

Unlike loops wrapped through PVC, The Direct Burial Loop does not have an air pocket resulting in fewer repeat service calls due to phantom detections caused by ground vibration.

Our Direct Burial loops are build with Solid 16AWG to create a tough rigid product that won't fall below the rebar pattern. Installing a Direct Burial loop over rebar is a snap! Simply offset the loop from the rebar pattern and tie it down with the supplied cable ties.

DBL7

Application	Domestic	Commercial
Driveway width	Up to 3.6m	Up to 3.3m
Loop Size	1.2 x 2.4m	1.8 x 1.8m

DBL9

Application	Domestic	Commercial
Driveway width	Up to 4.2m	Up to 3.6m
Loop Size	1.2 x 3.3m	1.8 x 2.4m

DBL10

Application	Domestic	Commercial
Driveway width	Up to 4.8m	Up to 4.2m
Loop Size	1.2 x 3.6m	1.8 x 3.0m

DBL12

Application	Domestic	Commercial
Driveway width	Up to 6m	Up to 5.4m
Loop Size	1.2 x 4.8m	1.8 x 4.2m

Install the highest quality loop, save time, and reduce service calls by using a Elsema's preformed loop

For detailed technical data visit www.elsema.com/automatic-gates/inductive-loop

Saw Cut Loops

DESCRIPTION

Saw-cut loops make installations easy, hassel-free and prevents false detections and detector lock-ups as they are one of the leading reasons why installers must do a repeat service call on brand new gate systems with loops installed. Which is unfortunate because it is a very difficult issue to diagnose, especially if you aren't considering air pockets as the cause of the problem.

Our saw-cut loops have a custom durable polyethylene outer jacket that protects nylon coated polyethylene insulated 16AWG stranded wire. These Loops have a built-in wing shaped backer-rod that causes the loop to fit snugly in a 3/16" saw-cut groove.

Our unique wire design prevents the installer from having to install backer-rod and creates a seal at the bottom of the groove, allowing the installer to apply sealant to a flat surface and resulting in at least a 30% savings in loop sealant to seal the groove when compared with hand wrapped wires in a ¼" wide groove.

SCL7

Application	Domestic	Commercial
Driveway width	Up to 3.6m	Up to 3.3m
Loop Size	1.2 x 2.4m	1.8 x 1.8m

SCL9

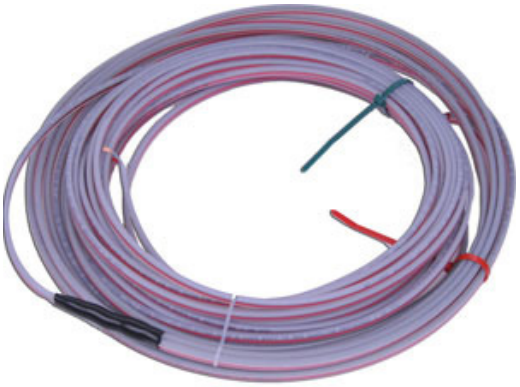
Application	Domestic	Commercial
Driveway width	Up to 4.2m	Up to 3.6m
Loop Size	1.2 x 3.3m	1.8 x 2.4m

SCL10

Application	Domestic	Commercial
Driveway width	Up to 4.8m	Up to 4.2m
Loop Size	1.2 x 3.6m	1.8 x 3.0m

SCL12

Application	Domestic	Commercial
Driveway width	Up to 6m	Up to 5.4m
Loop Size	1.2 x 4.8m	1.8 x 4.2m



Pre-formed saw-cut loop

Loop Goop

DESCRIPTION

Loop Goop (Sealant) is a tough and durable polyurethane resin designed to encapsulate, protect and insulate inductive loops for garage doors, gates, and parking applications. Effectively seals out moisture and provides exceptional chemical resistance to gasoline, motor oil, hydraulic brake fluid and other hydrocarbons. Loop Goop remains strong, flexible and resilient in cold & hot weather. It provides superior adhesion to wires and saw cuts in concrete and asphalt.

Wedge Tool allows installers to quickly and easily roll loop wire into the bottom of the saw-cut groove while standing. It is made of smooth and durable PVC that will not knick the loop wire.

The flat and angled wedge tools allow installers to easily push wire down into 135° dog eared corner cuts.

Cutting at the proper depth and width can yield significant savings in loop sealant.

Tubes of Loop Sealent Needed to Seal Loop and Entire Length of Lead-in				
Saw cut loop & Loop size	**3/16" Groove**		**1/4" Groove**	
	1 1/4" Depth	**1 1/2" Depth**	**1 1/4" Depth**	**1 1/2" Depth**
SCL7 1.2x2.4m or 1.8x1.8m	8	10	10	12
SCL9 1.2x3.3m or 1.8x2.4m	8	10	10	12
SCL10 1.2x3.6m or 1.8x3.0m	8	10	10	13
SCL12 1.2x4.8m or 1.8x4.2m	9	11	11	14
	Recommended			

Saw-Cut Loop Sealant with Flat 3/16" Sealant Tip

Part Number: LG

Caulking Gun

Part Number: LG-Gun

Wedge Tools

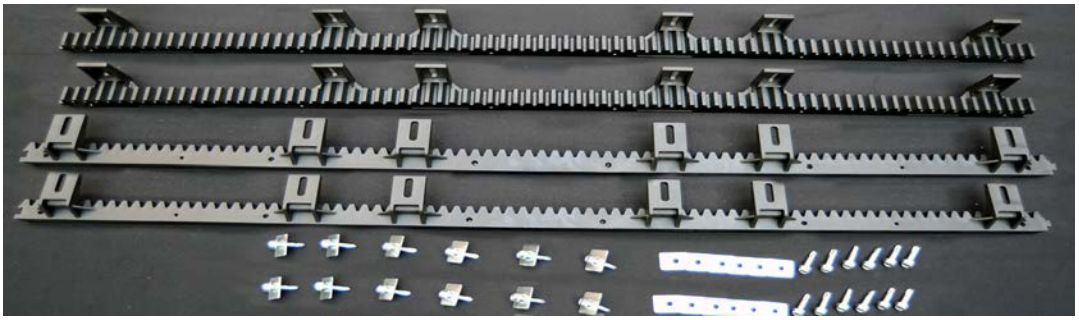
Wedge Tool allows installers to quickly and easily roll loop wire into the bottom of the saw-cut groove

ACCESSORIES

Gear Racks & Safety Bump Strip

DESCRIPTION

Elsema stocks steel re-enforced, nylon gear racks for automatic sliding gates. These racks are 1 metre long and comes in packs of 4 with mounting screws and brackets. Competitively priced and quality you can trust, they are the best value for money.



SAFETY BUMP STRIP

DESCRIPTION

The Safety bump strip is a safety device and is recommended to be installed on high speed gates. When the bump strip hits a person or an object, it will stop the gate instantly. It will also cushion the impact. Safety bump strip is carefully designed, manufactured and tested to ensure superior quality.

- Compatible with Penta series of receivers
- Battery operated transmitter included
- Stops the gate when compressed

LOCKING ACTUATOR

DESCRIPTION

Locking actuators should be installed when using hydraulic swing gate operators or any other type of swing gate operators. Elsema's LA24 Locking actuator has a 50mm stroke and a 20mm stainless steel shaft.

Supply	24 Volts DC
Stroke	50mm
Dimensions	551 x 112 x 74mm

MAGNETIC LOCKS

DESCRIPTION

Elsema stocks electromagnetic locks for all types of doors and gates. Our models are designed to secure any type of door or gate that closes against a fixed stop. All of our lock components are carefully designed, manufactured and tested to ensure superior quality.

Waterproof Magnetic lock with 280kg holding force

Holding force	280kg
Supply	Can be 12 or 24 Volts DC
Dimensions	200 x 44 x 40mm

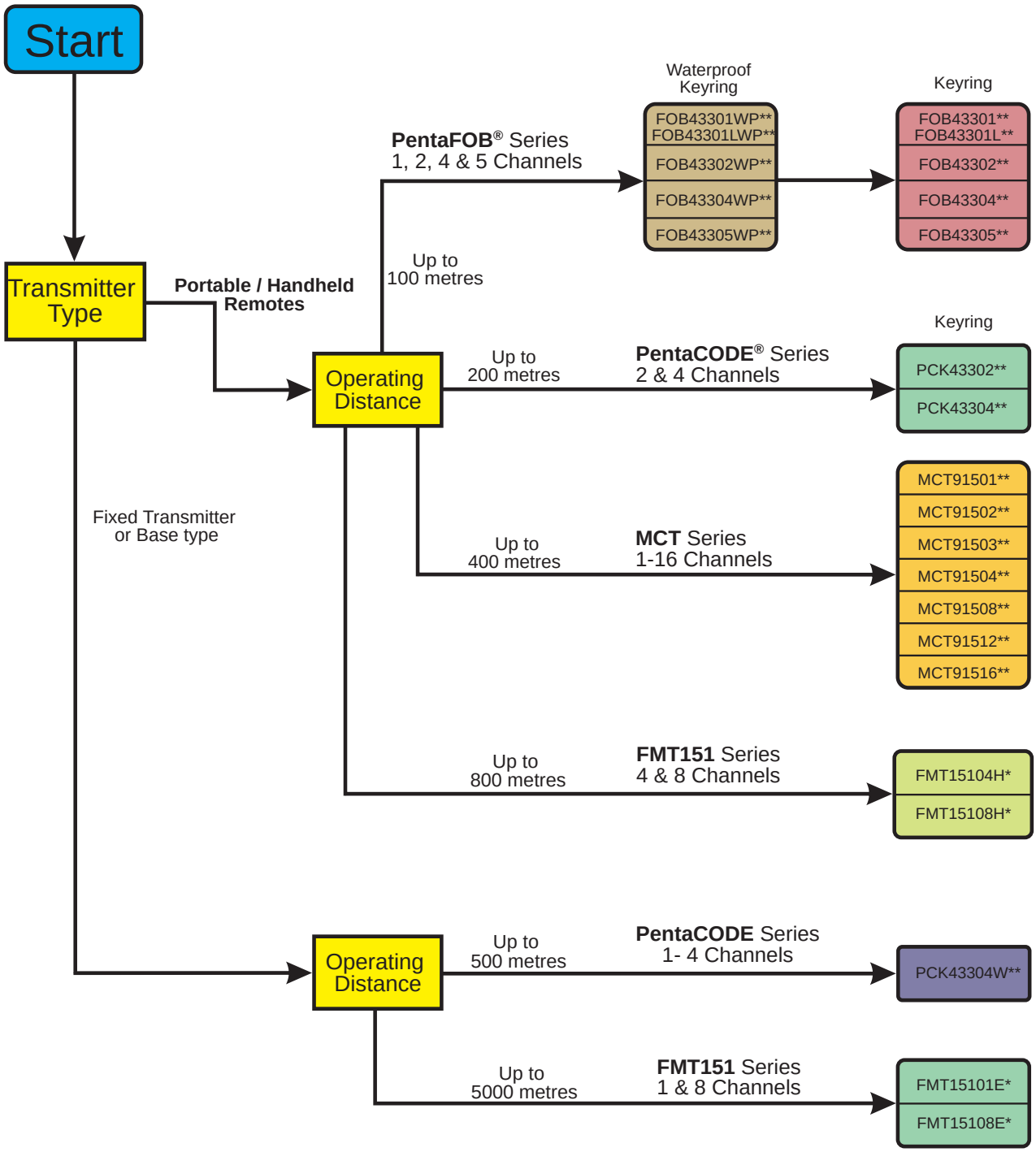
Waterproof Magnetic lock with 500kg holding force

Holding force	500kg
Supply	Can be 12 or 24 Volts DC
Dimensions	220 x 64 x 41mm

For detailed technical data visit www.elsema.com/automatic-gates/magneticlock

Wireless Communications

Transmitter Selection Guide



Available in Durable metal case

* Excellent Interference Immunity. Recommended for industrial application **where there** is electrical generated noise. Eg. Electric motors, computers etc.

** Uses frequency hopping, allows simultaneous operation of more than one transmitter

Elsema Receiver Selection Guide

433MHz PCR Series

Product	PCR43301RE	PCR43301240R	PCR433WG	PCR43302P	
Number of Channels	1	1	Weigand Output	2	
Supply Voltage	12 - 24 VAC/DC	240VAC	12 - 24 VAC/DC	7 - 36 VDC	
Switching Current	10 Amps	16 Amps	N/A	Open Collector Output	
Compatible Transmitters	PentaCODE® PentaFOB®	PentaCODE® PentaFOB®	PentaCODE®	PentaCODE® PentaFOB®	
Compatible Antennas	ANT433MHz Series	ANT433MHz Series	ANT433MHz series	ANT433MHz Series	
In IP66 Enclosure		**PCR43301240RE**			

151MHz FMT Series

Product	FMR15101	FMR15101240	FMR15102	FMR15102240	
Number of Channels	1	1	2	2	
Supply Voltage	12 - 24 VAC/DC	240 VAC	12 - 24 VAC/DC	240 VAC	
Switching Current	10 Amps	16 Amps	10 Amps	16 Amps	
Compatible Transmitters	151MHz FMT-Series	151MHz FMT-Series	151MHz FMT-Series	151MHz FMT-Series	
Compatible Antennas	ANT 151MHz Series	ANT 151MHz Series	ANT 151MHz Series	ANT 151MHz Series	
In IP66 Enclosure	**FMR15101E**	**FMR15101240E**	**FMR15102E**	**FMR15102240E**	

	PCR43302R	PCR43302240R	PCR43304R	PCR43305R	PCR433USB	PentaFOB® Programmer
	2	2	4	5		Used for advanced programming of the Penta series Receivers when used with PentaFOB® remotes
	12 - 24 VAC/DC	240VAC	12 - 24 VAC/DC	12 - 24 VAC/DC	USB	
	10 Amps	16 Amps	10 Amps	10 Amps	N/A	
	PentaCODE® PentaFOB®	PentaCODE® PentaFOB®	PentaCODE® PentaFOB®	PentaCODE® PentaFOB®	PentaCODE®	
	ANT433MHz Series	ANT433MHz Series	ANT433MHz Series	ANT433MHz Series	ANT433MHz Series	
		PCR43302240RE	**PCR43304RE**	**PCR43305RE**		

	FMR15104	FMR15104240	FMR15108	FMR1510812R
	4	4	8	8
	12 - 24 VAC/DC	240 VAC	12 - 24 VAC/DC	12 - 14 VAC/DC
	10 Amps	16 Amps	Open Collector Output	10 Amps
	151MHz FMT-Series	151MHz FMT-Series	151MHz FMT-Series	151MHz FMT-Series
	ANT 151MHz Series	ANT 151MHz Series	ANT 151MHz Series	ANT 151MHz Series
	FMR15104E	**FMR15104240E**		**FMR1510812RE**

Elsema Receiver Selection Guide

433MHz Gigalink® Series

Product	GLR43301	GLR43301240	GLR43302SS GLR43302SST	GLR43302	GLR43302240	
Number of Channels	1	1	2	2	2	
Supply Voltage	12 - 24 VAC/DC	240 VAC	7.5 - 28 VDC	12 - 24 VAC/DC	240 VAC	
Switching Current	10 Amps	16 Amps	Open Collector Output	10 Amps	16 Amps	
Compatible Transmitters	433MHz GLT-Series	433MHz GLT-Series	433MHz GLT-Series	433MHz GLT-Series	433MHz GLT-Series	
Compatible Antennas	ANT 433MHz Series	ANT 433MHz Series	ANT 433MHz Series	ANT 433MHz Series	ANT 433MHz Series	
In IP66 Enclosure		GLR43301240E		GLR43302E	GLR43302240E	

915MHz MCR Series

Product	MCR91501R	MCR91502P MCR91502PT	MCR91502R	MCR91504R	MCR91508POS	
Number of Channels	1	2	2	4	8	
Supply Voltage	12 - 24 VAC/DC	7 - 36 VDC	12 - 24 VAC/DC	12 - 24 VAC/DC	12 - 24 VAC/DC	
Switching Current	10 Amps	Open Collector Output	10 Amps	10 Amps	Positive Switching Outputs	
Compatible Transmitters	915MHz / MCT-Series	915MHz / MCT-Series	915MHz / MCT-Series	915MHz / MCT-Series	915MHz / MCT-Series	
Compatible Antennas	ANT 915MHz Series	ANT 915MHz Series	ANT 915MHz Series	ANT 915MHz Series	ANT 915MHz Series	
In IP66 Enclosure	MCR91501RE		MCR91502RE	MCR91504RE		

	GLR43304	GLR43304240	GLR43308POS	GLR43308	GLR43308R
	4	4	8	8	8
	12 - 24 VAC/DC	240 VAC	12 - 24 VAC/DC	12 - 24 VAC/DC	12 - 24 VAC/DC
	10 Amps	16 Amps	Positive Switching Outputs	Open Collector Output	10 Amps
	433MHz GLT-Series	433MHz GLT-Series	433MHz GLT-Series	433MHz GLT-Series	433MHz GLT-Series
	ANT 433MHz Series	ANT 433MHz Series	ANT 433MHz Series	ANT 433MHz Series	ANT 433MHz Series
	GLR43304E	**GLR43304240E**		**GLR43308E**	**GLR43308RE**

	MCR91508SS	MCR91508R	MCR91512SS	MCR91512R	MCR91516SS	MCR91516R
	8	8	12	12	16	16
	12 - 24 VAC/DC	12 - 24 VAC/DC	12 - 24 VAC/DC	12 - 24 VAC/DC	12 - 24 VAC/DC	12 - 24 VAC/DC
	Open Collector Output	10 Amps	Open Collector Output	10 Amps	Open Collector Output	10 Amps
	915MHz / MCT-Series	915MHz / MCT-Series	915MHz / MCT-Series	915MHz / MCT-Series	915MHz / MCT-Series	915MHz / MCT-Series
	ANT 915MHz Series	ANT 915MHz Series	ANT 915MHz Series	ANT 915MHz Series	ANT 915MHz Series	ANT 915MHz Series
		MCR91508RE		**MCR91512RE**		**MCR91516RE**

Waterproof PentaFOB® Remotes

FEATURES

- Waterproof Keyring transmitters (IP67)
- Option of 1, 2, 4 or 5 channels
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Complies to AS/NZS 4268, CE and FCC
- Works with all PCR Penta series of receivers

Part Number	Description
FOB43301WP	1-Button, Keyring Remote
FOB43301LWP	1-Large Button, Keyring Remote
FOB43302WP	2-Button, Keyring Remote
FOB43304WP	4-Button, Keyring Remote
FOB43305WP	5-Button, Keyring Remote

PentaFOB® SECURITY

TECHNICAL DATA

Over 17 billion encrypted codes
18mA (typical) at 3 Volts DC supply during transmission
Operating range of up to 100 metres depending on building structure and receiver antenna
Operating frequency: 433.100 to 434.700 MHz
Custom front design available
Works with all PCR Penta series of receivers

Industrial PentaFOB® Remote

FOB43302H

FEATURES

- PentaFOB® remote with 2 raised buttons
- Transmits on 5 different frequencies
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Competitive pricing
- Works with all PCR Penta series of receivers

Batteries Included

PentaFOB® SECURITY

DESCRIPTION

The FOB43302H is a hand-held remote control in an industrial case. It has large raised buttons which can easily be pressed even while wearing industrial gloves.

The remote comes with a robust rubber boot which protects it in an event of being dropped or accidently knocked against hard surfaces.

FOB43302H is powered by 2 x AA batteries for longer life cycle.

TECHNICAL DATA

Powered by 2 x AA battries (included)
Over 17 billion encrypted codes
18mA (typical) at 3 Volts DC supply during transmission
Operating range of up to 100 metres depending on building structure and receiver antenna
Operating frequency: 433.100 to 434.700 MHz
Dimensions: 125 x 75 x 35 mm
Works with all PCR Penta series of receivers

Keyring PentaFOB® Remote

The next generation of remote controls, superior to normal garage door rolling code remotes

FEATURES

- Keyring transmitter with 1, 2, 4 or 5 channels.
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency-hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Competitive pricing

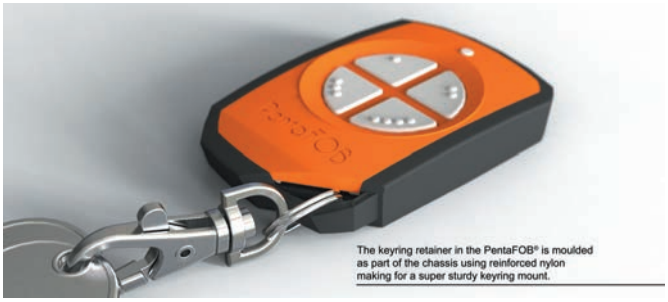
COLOUR OPTIONS

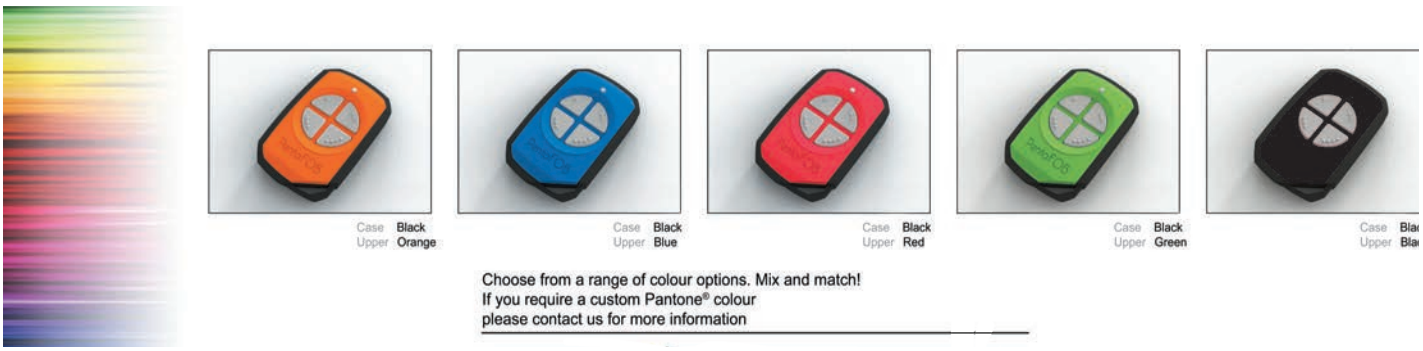
Personalise FOB remotes to match your personal choice or your company colour. Five different colours to choose from.

Default colour is orange. Add the colour code to the end of the part number to order a different colour.

RED = Red
BLU = Blue
BLK = Black
Lime = Green
xxx = Orange

Part Number	Description
FOB43301	1-Button, Keyring Remote
FOB43301L	1-Large Button, Keyring Remote
FOB43302	2-Button, Keyring Remote
FOB43304	4-Button, Keyring Remote
FOB43305	5-Button, Keyring Remote





PentaFOB® Wall Switch

FOB Switch or
FOB Switch Kit (PCR43301RE receiver included)

FEATURES

- Ultra slim and stylish design for wall mount
- Compatible with standard single-gang electrical box or just screw directly on to the wall
- Easily replace battery without removing from the wall
- Uses frequency hopping spread spectrum (FHSS)
- Designed in Australia
- Competitive pricing
- Works with all PCR Penta series of receivers

DESCRIPTION

The wireless wall remote can be mounted on the standard single-gang electrical wall box or directly on to the wall. It can wirelessly control lights, automatic gates and garage doors. It transmits a wireless signal to the Penta receiver which switches relays to turn the device On and Off. No need to run wires from the wall remote to the lights. Just mount the wall remote on the wall and connect Penta receiver to the light. Modern design and ultra-thin profile.

This wireless wall remote uses PentaFOB® technology

TECHNICAL DATA

Operating range of up to 100 metres depending on building structure and receiver antenna
Over 17 billion encrypted codes
18mA (typical) at 3 Volts DC supply during transmission
Battery life of 2 years with average use
Operating frequency: 433.100 to 434.700 MHz
Works with all PCR Penta series of receivers

Hard Wired PentaFOB® Transmitter

FOB43301W

FEATURES

- 2 x AAA battery operated
- 100m line of sight operation possible
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency-hopping spread spectrum (FHSS)
- Designed in Australia
- Competitive pricing

Ideal for wireless push button, PLC controls or anywhere else you need a wireless signal to transmit a contact closure.

Batteries included

DESCRIPTION

The FOB43301W is a 1-channel PentaFOB® transmitter designed to be used with external normally open or normally closed contact closure. You can wire in push buttons or easily integrate it into your existing equipment. The transmitter is housed in a compact enclosure with terminal block for easy wiring. A line of sight operating range of 100 metres is possible. The transmitter is powered by 2 x AAA batteries and has a low battery indicator. LED will start flashing when the battery is low.

TECHNICAL DATA

Supply Voltage	2 x AAA Battery
Operating Frequency	433.100 to 434.700MHz
Operating Range	100 metres line of sight
Number of Inputs	1 dry contact (Normally Open or Normally Closed)
Connections	Screw type terminal block.
Dimensions	65mm x 60mm x 35mm
Useable Receivers	All Elsema 433MHz Penta series

PentaFOB® Programmer

PentaFOB® Programmer

FEATURES

- Add, Delete and Edit individual PentaFOB® transmitters from the receiver
- Backup and Restore receiver's memory to mini FOB chips
- Easy-to-read with a large LCD display with back light
- 1-touch Master control for quick and easy setup
- 1 backup or restore chip is included
- USB programming cable included
- Password protect the receiver
- Ergonomically designed case
- No battery is required

DESCRIPTION

The PentaFOB® programmer can add, edit and delete individual PentaFOB® transmitters from the receiver's memory. Simply plug-in the USB cable on the back of the programmer and the other end of the cable to the receiver. The programmer will automatically detect the receiver model number and then display the corresponding information. With the easy-to-read 4-line large LCD the setup can be done quickly with clear instructions displayed on the screen. The programmer has a password feature which allows you to lock the receivers to prevent any unauthorised access to the receiver's memory.

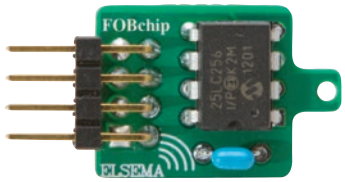
There is a backup or restore memory chip (FOBchip) included with each programmer. This chip is used to backup or restore the contents of a receiver. When there are 100's of transmitters programmed to a receiver the installer normally backs up the receiver memory in case the receiver is damaged or lost.

Additional backup or restore chips are sold separately.

TECHNICAL DATA

Dimensions	102mm x 140mm x 50mm
Display	4-Line LCD display

ACCESSORY



FOBCHIP: BACKUP AND RESTORE CHIP. USE THIS MEMORY CHIP TO BACKUP OR RESTORE ALL PROGRAMMED REMOTES IN A RECEIVER.

FOBCABLE: USB CABLE TO CONNECT THE PROGRAMMER TO THE PENTA SERIES RECEIVERS

Keyring PentaCODE® Remote

The next generation of remote controls, superior to normal garage door rolling code remotes

Part Number	Description
PCK43302	2-channel, keyring transmitter
PCK43304	4-channel, keyring transmitter
SV100	Sun visor holder or belt clip for keyring transmitter
WB100	Wall mount bracket for the keyring transmitter

FEATURES

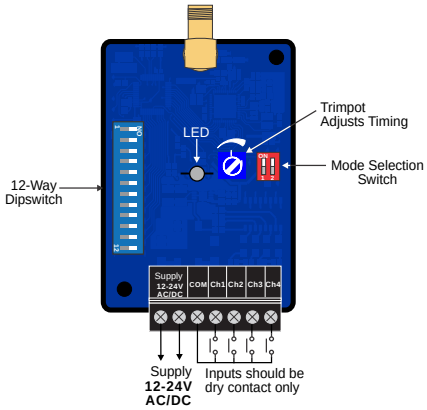
- Keyring transmitter with 2 or 4 channels
- Dual Coding System, 12-way dipswitch coding or one of over 17 billion encrypted codes
- Simultaneously transmits the code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency-hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia and competitive pricing
- AS/NZS 4268, CE and FCC Certified

Hard Wired PentaCODE® Transmitter

PCK43304W

FEATURES

- 12 to 24 Volts AC/DC supply
- 500m line of sight operation possible
- 12-way dipswitch or encrypted coding
- Compatible with all Penta series receivers
- Low standby current. Ideal for battery operation
- Frequency hopping between 433.100 to 434.700 MHz



Block Diagram

Ideal for wireless push button, PLC controls or anywhere else you need a wireless signal to transmit a contact closure.

DESCRIPTION

The PCK43304W is a 4-channel PentaCODE® transmitter designed to be used with external normally open contact closures. You can wire in push buttons or easily integrate it into your existing equipment. The transmitter is housed in a compact 70 x 50 mm enclosure with terminal block for easy wiring. A line of sight operating range of 500 metres is possible.

TECHNICAL DATA

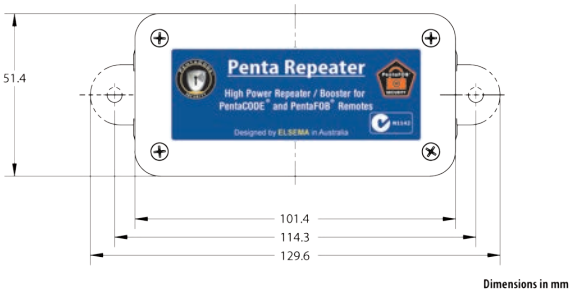
Supply Voltage	12 - 24 Volts AC or DC
Standby Current	6uA standby at 12 Volts DC. (Suitable for battery operation)
Current Consumption	27mA when transmitting
Operating Frequency	433.100 to 434.700MHz
Operating Range	500 metres with ANT433S antenna
Number of Inputs	4 dry contacts, optically isolated
Connections	Screw type terminal block. See block diagram
Dimensions	90mm x 50mm x 25mm
Useable Receivers	All Elsema 433MHz Penta series

Repeater / Booster

PCTR433

FEATURES

- Compatible with “PentaFOB®” and “PentaCODE®”remotes
- Micro USB or external supply
- Unlimited remotes can be programmed
- Highly sensitive receiver input stage
- Crystal controlled for high reliability
- Easy mounting to walls



Dimensions in mm

DESCRIPTION

The Penta Repeater, intelligently repeats the transmission from the PentaFOB® and PentaCODE® remote’s. The repeated signal is transmitted with high RF power which can increase the operating range of the remote to 500 metres. The repeater can be powered either by the micro USB connection or 12-24 Volts AC/DC supply.

If multiple repeaters are used for the same application, each repeater can be given different addresses with the digital display.

The repeaters memory can be backed up using the PentaFOB programmer.

TECHNICAL DATA

Supply Voltage	11 - 28 Volts AC/DC or Micro USB
Current Consumption	25mA standby
Operating Frequency	433.100 to 434.700 MHz
Useable Transmitters	All Elsema type PCK433 & FOB433 series
Useable Receivers	All Elsema type Penta Receivers
Operating Range	Up to 500 metres depending on building structure and antenna

PCR series receivers compatible with PentaFOB® & PentaCODE® Remotes

All PCR Penta series receives can be purchased in an IP66 enclosure

PCR43301RE

Channels	1 relay output
Supply	12-24 Volts AC/DC

PCR43301240R

PCR43301240RE (IP66 enclosure)

Channels	1 relay output
Supply	240 Volts AC

PCR43302R

PCR43302RE

Channels	2 relay outputs
Supply	12-24 Volts AC/DC

PCR43302240R

PCR43302240RE (IP66 enclosure)

Channels	2 relay outputs
Supply	240 Volts AC

PCR43304RE (IP66 enclosure)
PCR43304R

Channels	4 relay outputs
Supply	12-24 Volts AC/DC

PCR43305RE (IP66 enclosure)
PCR43305R

Channels	5 relay outputs
Supply	12-24 Volts AC/DC

PCR43302P

Channels	2 outputs (Open Collector)
Supply	7-36 Volts DC

PCR433WG

Output	Wiegand Output
Supply	12-24 Volts AC/DC

PCR433USB

Output	USB
Supply	12-24 Volts AC/DC

FMT Series. 151MHz Transmitters

Base Station

FMT15101E

FMT15108E

FMT15108

Hand-held Type

FMT15104H

FMT15108H

TECHNICAL DATA

Power Source	11.0 - 13.6 VDC	
Current Consumption	85mA during transmission	
Operating Frequency	151.600MHz (8 user selectable frequencies)	
Dimensions	90 x 56 x 15mm (PCB assembly)	140 x 60 x 34mm (enclosed)
Useable Operating Range	Up to 5000 metres, depending on installation and type of antenna used. Up to 800 metres for Hand-held remotes	
Compatible Receivers	Elsema type FMR151... series (with correct setting on the dipswitch)	

DESCRIPTION

This FMT151 series gives a controlled range of up to 5000 metres. The controlled operation can be any electronic or electrical operated device when used with the FMR151... series of receivers.

The channels are activated via screw type terminals onto which the user can connect reed switches, toggle switches, push buttons or any form of normally open (NO), voltage free contact.

ACCESSORY

9 VOLT DURACELL BATTERY PART NO: 6LR61

SIL08

RUBBER BOOT PART NO: RUB8

FMR Series. 151MHz Receivers

All 151MHz series receives can be purchased in an IP66 enclosure

FMR15101E (IP66 enclosure)
FMR15101

Channels	1 relay output
Supply	12-24 Volts AC/DC

FMR15101240E (IP66 enclosure)
FMR15101240

Channels	1 relay output
Supply	240 Volts AC

FMR15102E (IP66 enclosure)
FMR15102

Channels	2 relay outputs
Supply	12-24 Volts AC/DC

FMR15102240RE (IP66 enclosure)
FMR15102240

Channels	2 relay outputs
Supply	240 Volts AC

FMR1510104E (IP66 enclosure)
FMR15104

Channels	4 relay outputs
Supply	12-24 Volts AC/DC

FMR15104240E (IP66 enclosure)
FMR15104240

Channels	4 relay outputs
Supply	240 Volts AC

FMR1510812RE (IP66 enclosure)
FMR1510812R

Channels	8 relay outputs
Supply	11-14 Volts AC/DC

FMR1510824RE (IP66 enclosure)
FMR1510824R

Channels	8 relay outputs
Supply	21-28 Volts AC/DC

FMR15108R (IP66 enclosure)
FMR15108

Channels	8 outputs (Open Collector)
Supply	12-24 Volts AC/DC

Analogue Transmitter

TXA15101E

FEATURES

- 1 Analog input which is 4-20mA with 10 bit accuracy
- 1 Digital input which is a voltage-free contact
- User selectable up to 8 different frequencies
- Compatible with RXA15101E receiver
- Easy to program and install with code switch technology.
- Available with durable alloy metal case
- Not affected by natural or man-made electrical interference
- User selectable sampling rate for analog input

DESCRIPTION

The TXA15101E is an analog and digital 151MHz transmitter. The analog signal, normally 4-20mA is transmitted and then recreated at the receivers (RXA15101E) analog output. Also, the digital input can be simultaneously transmitted with the analog signal. This eliminates the high cost of wiring and has the flexibility of wireless data collection.

Using 151MHz has superior penetration in congested industrial environments with steel construction. Higher frequencies such as 433MHz or 915MHz tend to reflect off metal and make wireless data collection difficult.

TECHNICAL DATA

Power Source	11.0 - 13.6 VDC
Current Consumption	85mA transmitting. 12mA on standby
Operating Frequency	151.600MHz (8 user selectable frequencies)
Dimensions	140 x 60 x 34mm
Useable Operating Range	Up to 5000 metres, depending on installation and type of antenna used.
Compatible Receivers	Elsema type RXA15101E

Analogue Receiver

RXA15101E

FEATURES

- One 4-20mA analog output and one digital output
- Supply voltage can be AC or DC
- Low current consumption
- Built-in noise or signal strength indicator
- User can select 8 different frequencies
- Easy code setup with dipswitch settings

RXA SERIES

DESCRIPTION

The 151MHz receivers use dual conversion, narrow band FM which makes it ideal for industrial applications. Built-into the receiver is a noise and signal strength indicator. The user selectable frequency synthesizer allows for easy installation on a frequency that is not in use, allowing optimal performance in the receiving range.

The receiver has a 4-20mA analog signal output and a relay output. The analog and digital signal transmitted from the TXA15101E transmitter is recreated at the receiver.

TECHNICAL DATA

Supply Voltage	10 - 28 Volts DC. Can use Elsema DC or AC power supply, 12PP1000
Current Consumption	35mA standby
Operating Frequency	151.600MHz (8 user selectable frequencies)
Output	4-20 mA analog signal and 1 relay output
Antenna	Elsema ANT151S or ANT151M
Dimensions	125 x 80 x 33mm
Compatible Transmitters	Elsema type TXA15101E

GLT Series. 433MHz Gigalink® Transmitters

FEATURES

- Hand-held transmitter
- Available with 1, 2, 4 & 8 channels
- Built-in LED indicates button activation
- Compatible with all GLR433 series receivers
- Over 4 billion code combinations
- Domestic, commercial and industrial applications

GLT43301

GLT43302

GLT43304

GLT43308

TECHNICAL DATA

Power Source	9 Volt battery
Current Consumption	35mA during transmission
Operating Frequency	433.920MHz
Dimensions	81 x 56 x 24mm (GLT43308: 130 x 67 x 27mm)
Useable Operating Range	Up to 350 metres
Compatible Receivers	All Elsema type GLR433 series

ACCESSORY

9 VOLT DURACELL BATTERY PART NO: 6LR61

SIL04/ SIL08

RUBBER BOOT PART NO: RUB4/RUB8

GLR Series. 433MHz Gigalink® Receivers

All 433MHz series receives can be purchased in an IP66 enclosure

GLR43301E (IP66 enclosure)
GLR43301

Channels	1 relay output
Supply	12-24 Volts AC/DC

GLR43301240E (IP66 enclosure)
GLR43301240

Channels	1 relay output
Supply	240 Volts AC

GLR43302E (IP66 enclosure)
GLR43302

Channels	2 relay outputs
Supply	12-24 Volts AC/DC

GLR43302240E (IP66 enclosure)
GLR43302240

Channels	2 relay outputs
Supply	240 Volts AC

GLR43304E (IP66 enclosure)
GLR43304

Channels	4 relay outputs
Supply	12-24 Volts AC/DC

GLR43304240E (IP66 enclosure)
GLR43304240

Channels	4 relay outputs
Supply	240 Volts AC

GLR43308RE (IP66 enclosure)
GLR43308R

Channels	8 relay outputs
Supply	12-24 Volts AC/DC

GLR43308
(Open Collector)

GLR43308POS
(Positive Switching)

Channels	8 outputs
Supply	12-24 Volts AC/DC

GLR43302SS
(Plug-in)

GLR43302SST
(Terminal)

Channels	2 outputs (Open Collector)
Supply	7.5-28 Volts DC only

GLT433 SERIES

MCT Series. 915MHz Transmitters

FEATURES

- Available with 1, 2, or 4 channels
- 12-way dipswitch (4096 codes) or Encrypted (over 16 million codes)
- Fast Frequency-hopping operates on several frequencies for interference or jamming immunity

MCT91501

MCT91502

MCT91504

DESCRIPTION

The transmitters use fast frequency-hopping (FFH) to allow up to eight transmitters to be used in the same area. No interference or jamming will occur.

The FFH technology is usually used in very expensive equipment with military or medical applications. Elsema has developed a world-first low-cost lightweight hand-held FFH transmitter.

TECHNICAL DATA

Power Source	9 Volt battery
Current Consumption	55mA (typical). Only during transmission
Operating Frequency	915 to 928MHz
Dimensions	96 x 55 x 20mm
Useable Operating Range	Up to 400 metres
Compatible Receivers	All Elsema type MCR915 series

ACCESSORY

9 VOLT DURACELL BATTERY PART NO: 6LR61

RUBBER BOOT PART NO: RUB4

FEATURES

- Available with 8, 12, or 16 channels
- 12-way dipswitch (4096 codes) or Encrypted (over 16 million codes)
- Fast Frequency-hopping operates on several frequencies for interference or jamming immunity

MCT91508

MCT91512

MCT91516

TECHNICAL DATA

Power Source	9 Volt battery
Current Consumption	55mA (typical). Only during transmission
Operating Frequency	915 to 928MHz
Dimensions	130 x 67 x 27mm
Useable Operating Range	Up to 400 metres
Compatible Receivers	All Elsema type MCR915 series

ACCESSORY

9 VOLT DURACELL BATTERY PART NO: 6LR61

SIL08

RUBBER BOOT PART NO: RUB8

MCR Series. 915MHz Receivers

All 915MHz series receives can be purchased in an IP66 enclosure

MCR91501R

MCR91501RE (IP66 enclosure)

Channels	1 relay output
Supply	12-24 Volts AC/DC

MCR91502R

MCR91502RE (IP66 enclosure)

Channels	2 relay output
Supply	12-24 Volts AC/DC

MCR91504R

MCR91504RE (IP66 enclosure)

Channels	4 relay outputs
Supply	12-24 Volts AC/DC

MCR91508R

MCR91508RE (IP66 enclosure)

Channels	8 relay outputs
Supply	12-24 Volts AC/DC

MCR91512R

MCR91512RE (IP66 enclosure)

Channels	12 relay outputs
Supply	12-24 Volts AC/DC

MCR91516R

MCR91516RE (IP66 enclosure)

Channels	16 relay outputs
Supply	12-24 Volts AC/DC

MCR91502P (Plug-in)

Channels	2 outputs (Open Collector)
Supply	7-36 Volts DC Only

MCR91502PT (Terminal block)

Channels	2 outputs (Open Collector)
Supply	7-36 Volts DC Only

MCR91508SS

Channels	8 outputs (Open Collector)
Supply	12-24 Volts AC/DC

MCR91508POS

Channels	8 outputs (Positive switching)
Supply	12-24 Volts AC/DC

MCR91512SS

Channels	12 outputs (Open Collector)
Supply	12-24 Volts AC/DC

MCR91516SS

Channels	16 outputs (Open Collector)
Supply	12-24 Volts AC/DC

Antennas

Elsema has a wide selection of antennas manufactured by our RF engineers using the latest technology and test equipment from Rohde & Schwarz. We have our standard antennas on 915MHz, 433MHz and 151MHz that are always in stock. Antennas come on different frequency bands, connectors or coaxial cable.

To select the correct antenna you will need to match the antenna frequency to the equipment you are using. Most of Elsema's radio equipment is on **915MHz, 433MHz and 151MHz**. For the higher frequencies such as 433MHz and 915MHz it is important that the coaxial cable is low loss and is terminated with a high quality connector.

As a general rule we have used high quality SMA connectors for frequencies above 300MHz. For frequencies below 300MHz the PL259 and the SO239 is used.

Other considerations in selecting the correct antenna is the gain, SWR and coaxial cable.

Antenna gain is often measured with respect to a hypothetical antenna that radiates equally in all directions, an isotropic radiator. The gain is in decibels called dBi. The antenna gain can also be measured in dBd which is equal to dBi – 2.15.

The SWR is a measure of the amount of mismatch between the load (Antenna) and the transmission line's impedance. A SWR of 1 is a perfect match which occurs on a transmission line where there are no reflections. An SWR less than 1.5: 1 is considered good and a SWR greater than 2 : 1 is usually unacceptable. This may indicate a problem with the antenna.

151MHz Antennas

151Mini

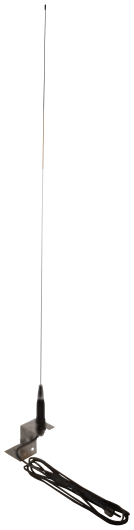
Frequency	150.50 to 153.00MHz
Length	19 cm
Connection	SMA

151S

Frequency	149.5 to 152.5MHz
Length	21 cm
Connection	PL259

ANT151S

Frequency	149.5 to 152.5MHz
Length	Whip:21 cm, Cable 3.6m
Connection	PL259



ANT151M

Frequency	148 to 153MHz
Length	Whip:1m, Cable 3.6m
Connection	PL259

CABLE EXTENSIONS

- AB3.6PL, coaxial is 3.6 metres
- AB5.0PL, coaxial is 5.0 metres
- AB7.5PL, coaxial is 7.5 metres
- AB10PL, coaxial is 10 metres

433MHz Antennas

433Micro

Frequency	433 to 435MHz
Length	45 mm
Connection	SMA

433Mini

Frequency	430 to 440MHz
Length	18 cm
Connection	SMA

ANT433LP

Frequency	430 to 440MHz
Length	Whip:40mm, Cable 3.6m
Connection	SMA

ANT433M

Frequency	428 to 437MHz
Length	Whip:1m, Cable 3.6m
Connection	SMA

ANT433S

Frequency	425.00 to 442.50MHz
Length	Whip:38 cm, Cable 3.6m
Connection	SMA

CABLE EXTENSIONS

- AB1.5SMA, coaxial is 1.5 metres
- AB5.0SMA, coaxial is 5.0 metres
- AB7.5SMA, coaxial is 7.5 metres
- AB10SMA, coaxial is 10 metres

915MHz Antennas

915Mini

Frequency	895 to 930MHz
Length	20 cm
Connection	SMA

915S-N

Frequency	875 to 950MHz
Length	18 cm
Connection	N-Type connector

ANT915LP

Frequency	860 to 960MHz
Length	Whip:40mm, Cable 3.6m
Connection	SMA

ANT915M

Frequency	870 to 950MHz
Length	Whip 65 cm, Cable 3.6m
Connection	SMA

ANT915S

Frequency	870 to 940MHz
Length	Whip:19 cm, Cable 3.6m
Connection	SMA

CABLE EXTENSIONS

- AB1.5SMA, coaxial is 1.5 metres
- AB5.0SMA, coaxial is 5.0 metres
- AB7.5SMA, coaxial is 7.5 metres
- AB10SMA, coaxial is 10 metres

Batteries

6 Volt 4LR44

3 Volt Lithium Battery

9 Volt Alkaline Battery

12 Volt Alkaline Battery

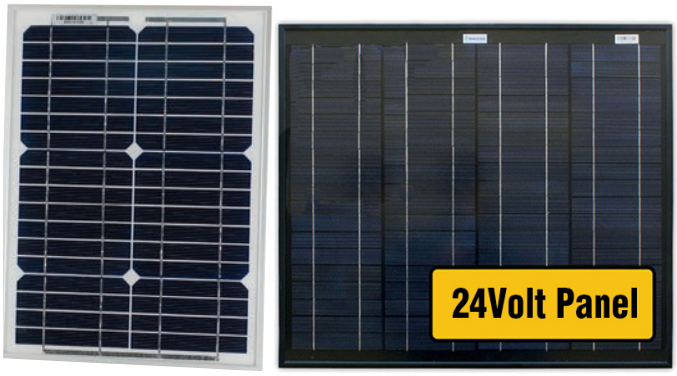
12 Volt 1.2Ah Rechargeable
LAB12-1.2

12 Volt 2.3Ah Rechargeable
LAB12-2.3

12 Volt 7.0Ah Rechargeable
LAB12-7.0

12 Volt 15Ah Deep Cycle
LAB12-15

Solar Panels & Battery Chargers



DESCRIPTION

Elsema's SP series of solar panels provides you with an eco-friendly solution to supply power. Typical applications include:

- Automatic gates and doors
- Water pumping
- Wireless telemetry
- Lighting and signage
- Transmitter or receiver stand-alone systems

TECHNICAL DATA					24V Panel	
Model	**SP5**	**SP10**	**SP20**	**SP40**	**SP40-24**	**SP60**
Rated Power (Watts)	5 Watts	10 Watts	20 Watts	40 Watts	40 Watts	60 Watts
V_{mp} (Volts)	17.8V	17.8V	17.8V	17.8V	35.5V	17.8V
I_{mp} (Amps)	0.28 A	0.56 A	1.12 A	2.25 A	1.13 A	3.37 A
V_{oc} (Volts)	22.3 V	22.3 V	22.3 V	22.3 V	43.1 V	22.3 V
I_{sc} (Amps)	0.30 A	0.61 A	1.21 A	2.43 A	1.85 A	3.64 A
Dimension (mm)	250 x 185 x 15	415 x 185 x 18	470 x 345 x 25	550 x 505 x 25	670x 570 x 35	770 x 505 x 30
Weight (kg)	0.5	1.0	2.0	3.5	4.6	5.0

BATTERY CHARGERS

10.0 AMPS SOLAR CHARGER WITH MPPT AND BLUETOOTH

PART NO : MPPT 75/10

Google play

Available on the App Store

1.2 AMPS CHARGER WITH LED INDICATION

PART NO	BACH12-1200	BACH24-1200
Supply Voltage	12 Volts	24 Volts
Charging Current	1.2 Amps	1.2 Amps

BATTERY CHARGER WITH REGULATED SUPPLY

PART NO	SUPREG12	SUPREG24
Supply Voltage	12 Volts	24 Volts
Charging Current	0.8 Amps	0.8 Amps
Regulated Output	5 Amps	5 Amps

Flashing Lights

DESCRIPTION

Flashings lights (also known as warning lights or strobe lights) can be used in a variety of applications such as warning lights to indicate danger. Elsema has different color lights to suite your application. It can be used on trucks, carts, forklifts, automatic gates & doors or any other application which requires a visual indication of any danger or warning.

E80 SERIES

E80L SERIES
90° Wall Mount Type

PART NO	E80-A	E80-R	E80-B	E80-G
Colour	Amber	Red	Blue	Green
Supply Voltage	12-24VDC	12-24VDC	12-24VDC	12-24VDC

E80L-A	E80L-R	E80L-B	E80L-G
Amber	Red	Blue	Green
12-24VDC	12-24VDC	12-24VDC	12-24VDC

ST SERIES

PART NO	ST12A	ST12R	ST12B
Colour	Amber	Red	Blue
Supply Voltage	12 Volts DC	12 Volts DC	12 Volts DC

ST24A	ST24R	ST24B
Amber	Red	Blue
24 Volts DC	24 Volts DC	24 Volts DC

Auxiliary Relay Cards

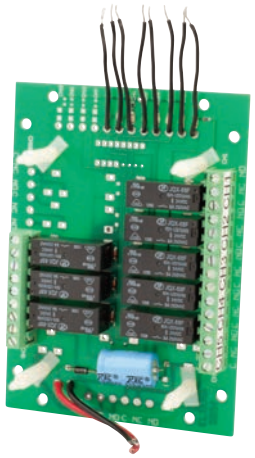
FEATURES

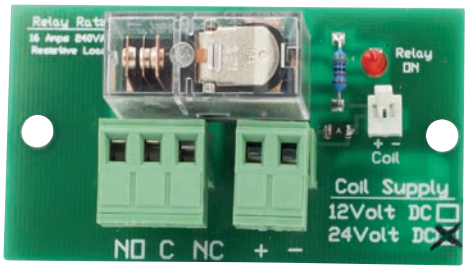
- Relay rated up to 16 Amps 240 VAC
- Normally open and normally closed contacts
- Relay coil protected for spike-free operation
- On-board LED to indicate relay “on”
- Available with plug-in terminal blocks for easy installation
- Optional QM100 or QM150 bracket to mount up to 4 relay modules together

DESCRIPTION

When you have to switch large loads with open collector outputs or small relays then the auxiliary relay modules can be used. The relay module will isolate and protect your electronic circuits.

The relay modules use an industrial grade relay which conforms to several safety standards, UL, C-UL and VDE.





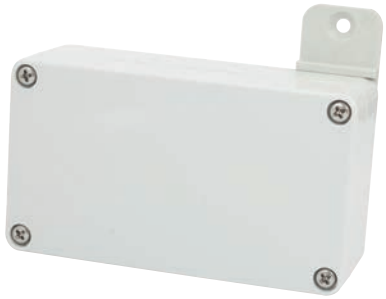
PART NO	RELAY8-12
Contact Rating	10 Amps 240VAC
Supply Voltage	11 – 14VDC

PART NO	RELAY1-12
Contact Rating	16 Amps 250VAC
Supply Voltage	11 – 14VDC

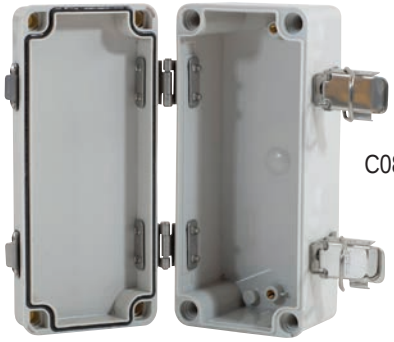
Plastic Cases

DESCRIPTION

Cases are all to EN60529 standard with Ingress Protection of IP66. Suitable for temperature range -40 to +80 degrees.



C0611 – Size 65 x 115 x 40 mm



C0818 – Size 80 x 180 x 70 mm

C1015 – Size 100 x 150 x 70 mm

C1015T – Size 100 x 150 x 70 mm
Metal Latch and Transparent Cover

C1020 – Size 100 x 200 x 70 mm

C1020T – Size 100 x 200 x 70 mm
Plastic Latch and Transparent Cover

C1217 – Size 125 x 175 x 75 mm

C1515 – Size 150 x 150 x 90 mm

C1515T – Size 150 x 150 x 90 mm
Plastic Latch and Transparent Cover

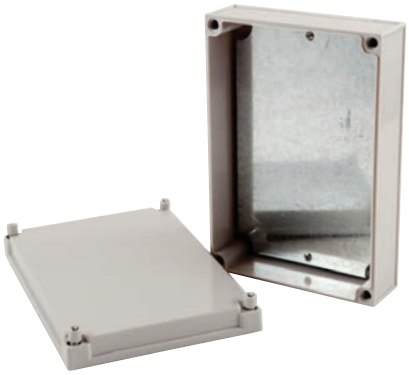
C1520 – Size 150 x 200 x 100 mm

C1717 – Size 175 x 175 x 75 mm

Plastic Cases

C1722 – Size 170 x 220 x 110 mm

C1722T – Size 170 x 220 x 110 mm
Plastic Latch and Transparent Cover



C1725 – Size 175 x 250 x 75 mm

C1725-1 – Size 175 x 250 x 100 mm

C1929 – Size 190 x 290 x 140 mm

C1929T – Size 190 x 290 x 140 mm
Plastic Latch and Transparent Cover

C2020-S – Size 200 x 200 x 75 mm

C2828 – Size 280 x 280 x 130 mm

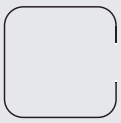
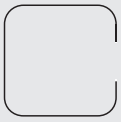
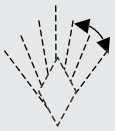
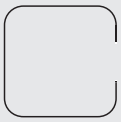
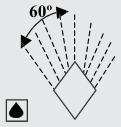
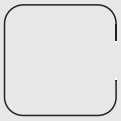
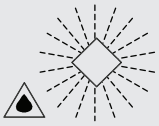
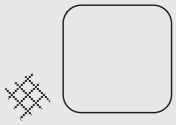
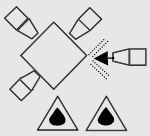
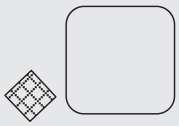
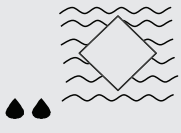
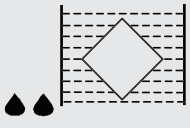
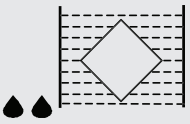
C3428 – Size 340 x 280 x 130 mm

C3428T – Size 340 x 280 x 130 mm
Transparent Cover

PLASTIC CASES

International Protection (IP) Ratings

IP54 = IP Letter Code _____ IP
1st Digit _____ 5
2nd Digit _____ 4

1st Digit	Protection from solid objects	2nd Digit	Protection from moisture
0	NON-PROTECTED	0	NON-PROTECTED
1	 Protected against solid objects greater than 50mm	1	 Protected against dripping water
2	 Protected against solid objects greater than 12mm	2	 Protected against dripping water when tilted up to 15º
3	 Protected against solid objects greater than 2.5mm Ø	3	 Protected against spraying water
4	 Protected against solid objects greater than 1.0mm Ø	4	 Protected against splashing water
5	 Dust protected	5	 Protected against water jets
6	 Dust tight	6	 Protected against heavy seas
		7	 Protected against the effects of immersion between 15cm and 1m
		8	 Protected against long periods of immersion under pressure

IP RATING

Notes

Notes

Notes

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