GARD

G 4000
4 m
12 ft

G 2500
2,5 m
8 ft

Automatic parking barriers

G 4000 / G 4001

The automatic FAST barrier for passages up to 4 m [12ft], with an extra feature: the power supply at 24V. Essential for passages of intensive use, the low voltage technology allows you to obtain maximum efficiency with control features and complete safety.

• A complete automation
All the essential components for operation even in the event of BLACK OUT are assembled inside the structure; in addition to the motor and the command logic, the **G 4000** is designed to **house the optional emergency batteries**

• Reliability and duration even in the presence of strong atmospheric agents
The structure of the GARD systems is made entirely from galvanized steel with a polyester powder-based **RAL 2004** paint finishing. For applications in **areas subject to strong corrosive agents**, such as smog and salinity, the G 4001 version is available in **glazed stainless steel** for a lasting working life.
Also for **areas subject to strong winds**, CAME has designed the GARD systems so that they can be fitted with a **tubular arm**.

• Self Locking Mechanism
All the versions in the **GARD series** feature self-locking gears that **lock the arm** both in the open and closed positions. In case of power failure the arm can be raised or lowered manually, without opening the cabinet, thanks to a lock mechanism situated outside the cabinet.

• A versatile automation
The possibility of installing keypads or key switches, photocells and safety flashers **directly on the cabinet of the barrier** simplifies the installation and reduces the cost of the system, as well as accepting inputs from any access control system: radio transmitter, card reader, telephone entry or safety device loops or photocells

CAME

• Main safety features
The electronic control panel, with its adjustment system, allows:
- **the adjustment of the speed;**
- **the adjustment of the approach speed;**
- **the detection of an obstacle** thanks to the inherent obstacle detection device system, that provides for the immediate reversal or stop of the movement.

But an automatic system at 24V DC means above all **a system operating in complete safety**.
The motor and all the command and safety accessories are completely powered at 24V DC in direct current.

G 2500

The simplified version at 230V (120V) for fast passages

G 2500 is the fast barrier in the GARD series for passages **up to 2.5 m [8ft]**. The most simple automation solution to adopt. The ideal selection for small passages for private and small condominium use.
As for all the models in the GARD series, G 2500 can be fitted with the **low ceiling folding arm articulation** for applications inside buildings and when ceilings are present.

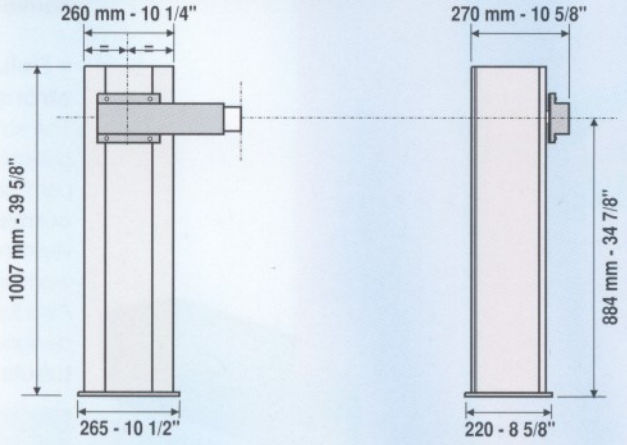
Technical characteristics

Type	G 4000 / G 4001	G 2500
Class of Operation	II, III, IV	II, III, IV
Protection level	IP54 (NEMA 3)	IP54 (NEMA 3)
Weight	47 Kg [104 Lbs]	39,5 kg [87 Lbs]
Power supply	120/230VAC, 24VDC	120/230VAC, 24VDC
Motor power supply	24VDC	120/230VAC
Current Draw	1,3A:230V [2,6A:120V] 15A:24VDC	1A:230V [2A:120V]
Motor power	300W	120W
Operative intermittence	intensive operation	30%
Torque	200 N.m.[1770 in-Lbs]	70 N.m. [620 in-Lbs]
Opening time	2-6 sec	2 sec

General indications for use

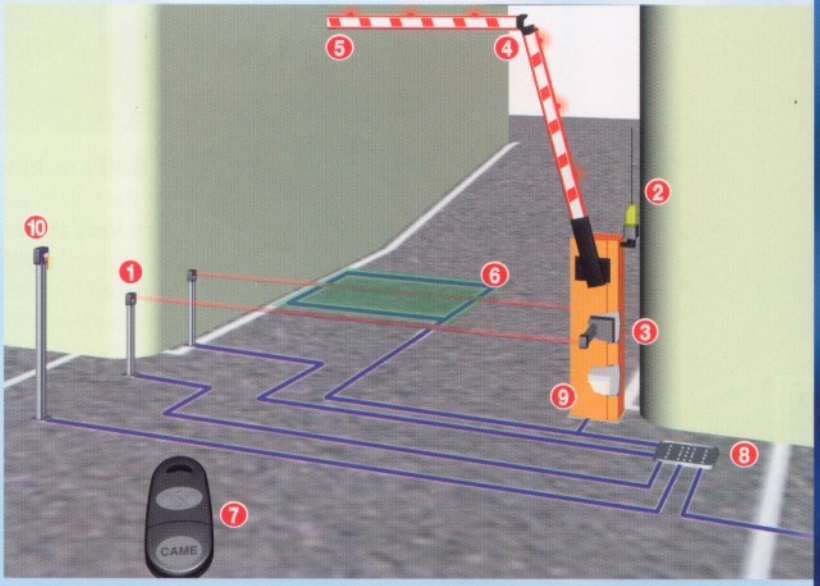
Type	G 4000 / 1	G 2500
Arm without accessories	4 m Max. [12ft]	2.5 m Max [8 8ft]
Arm with rubber, lights	3.5 m Max. [12.5ft]	_
Arm with moveable base or rack	3 m Max. [9.8ft]	_
Arm with rubber, lights + rack or moveable base	2.5 m Max. [8 ft]	_

Size measurements



Typical Installation

1. • Post H= 0.5 m [20"]
   • Safety photocell
2. • Flashing lamp
   • Antenna
3. • Fixing support
   • Safety photocell
4. • Folding Arm articulation
5. • Aluminium arm
   • Signalling lamps
   • Reflective tape
   • Rubber bumper strip
6. • Magnetic loop sensor
7. • Transmitter
8. • Junction box
9. • G 4000 unit
   • Control board
   • Radio receiver
   • Emergency batteries
10. • Keypad
    Key switch
    Magnetic key reader
    • Column H= 1 m .[39.5"]



Applications

DEP 5474

CAME

EPS Antenna for Vehicle Access

The EPS antenna is the latest innovation for vehicle access system. It is based on the technology currently used in the Electronic Road Pricing (ERP) System in Singapore.

The EPS antenna is designed to read the 10 digits ID from the in-vehicle unit (IU) in your vehicle. So no more purchase of vehicle tags. All you need is to install the EPS antenna with your barrier or auto gate system, you can drive through hands-free.

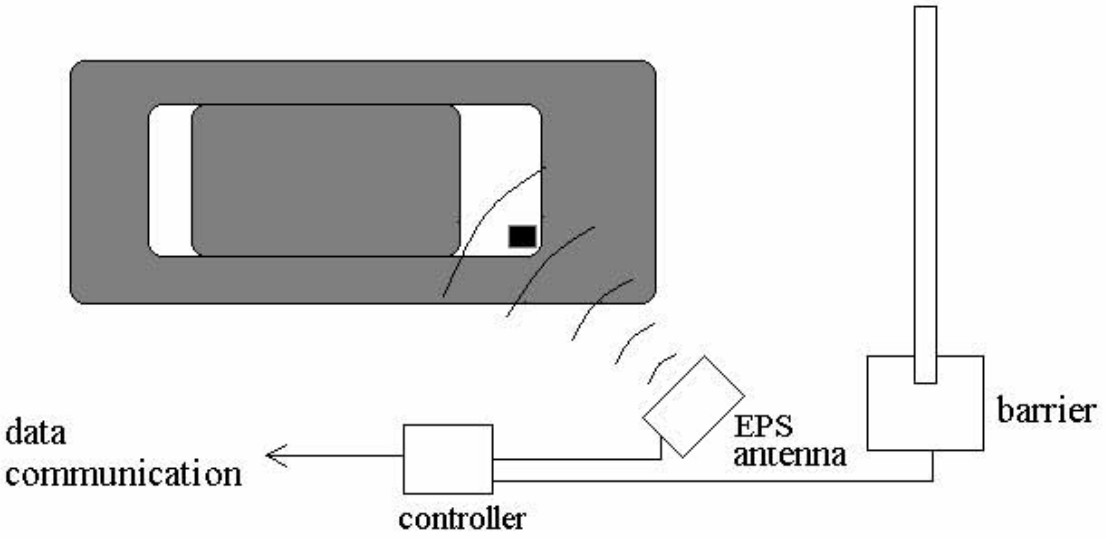
Antenna Specifications

Model		EANT-2
Dimensions	Width	309.5mm
	Height	308mm
	Depth	153mm
Weight		5 kg
Ambient Temperature		10 to 50°C
Relative Humidity		20 to 95% RH
Frequency (center)		2420 MHz
Reading Range		Up to 4m x 2m
Power Supply (current)		DC24V +/- 10% (1A max)
Colour		Munsell N7.0 (Grey)
Material	Body	Die casting
	Case	AES resins
Manufacturer		Mitsubishi Heavy Industries, Ltd

Controller Specification

Capacity	3700 records
Operating Temperature	0 to 70°C
Power Supply	7 to 25 VDC
Data Interface	RS422/485
Manufacture	Texas Instruments

Installation Guide



The antenna must be mounted at the right hand side of the lane. It can be mounted to the pole or can be hanged from ceiling. The height of the antenna from the ground is about 2.0m. The position of the antenna away from the barrier arm should not be more 0.5m. A vehicle loop must be installed to detect the vehicle present to activate the EPS antenna. This loop is about 2.5m away from the antenna. Make sure that there are no obstacles or objects within a radius of 50cm from the antenna, especially in front portion so that the radio wave is not block. If there is more than one antenna to be installed, the antennas should be 5m apart.

Note: The specification is preliminary and subject to change without prior notification.

For more information, please contact:

tranSpeed®

TSG60DB

The Proven RFID Long Range Reader for Vehicles/Personnel Access Control 8 metres

Supports the broadest range of card technologies

deister electronic · LEGIC · mifare · HID · EM, etc.

Features and Benefits

- **Fast and reliable identification of up to 8 metres**
- **100% hands-free system**
- **Dual-technology transponders for a 'Single-Card" solution (2.45GHz and 13.56MHz/125KHz)**
- **Multi-channel frequency offset**
- **Aesthetic and rugged housing**
- **IP65 Protection**
- **Adjustable reading range**
- **Maintenance free**

deister electronic
The RFID Company

tranSpeed®

TSG60DB

TSG60DB RFID Long Range Reader for Fast and Reliable Personnel/Vehicle Access Identification

TSG60DB is a long range reader, using the 2.45GHz microwave technology and is specially developed for application where vehicle/personnel identification of up to 8 metres is required. High speed detection and the ability to mount the transponders directly on to metal surfaces make this system ideal for vehicle identification. It offers multi-credentials reading of up to 12 credentials simultaneously in anti-collision protocol mode. Enclosed in aesthetic design housing and at the same time rugged, sturdy, anti-corrosion and waterproofing, TSG60DB is exceptionally compact. It provides optimum performance even in hostile, harsh, wet/hot environment that is frequently exposed to harsh elements such as sun, rain, dust and humidity factors.

Features

- easy to install and service-friendly
- rugged enclosure, suitable for outdoor usage
- anti-corrosion, waterproof enclosure
- high speed detection for reliable identification
- audible and visual feedback for easy and safe system operation
- excellent reading distance even at tilted angle
- compatible with most existing access control system
- adjustable reading distance
- up to to 32 readers cross-linkable
- CE approved

Serial Interface Converters (SIC)

To use the TSG60DB readers with existing systems, deister electronic offers a wide range of smart Serial Interface Converters (SIC). With these converters, all standard and customised protocols and interfaces are supported. Every SIC has an encrypted deBus protocol to the reader to secure the data integrity.

Technical Specifications of TSG60DB, Serial Interface Converter & Transponders

Product	Dimension (mm)	Housing	Protection Type	Power Supply	Interfaces	Operating Temp	Reading Distance
TSG60DB	295 x 170 x 92.5	ABS/PMMA, Al	IP65	12...28VDC/ max. 300mA	RS485 with deBus protocol	-30°C..+60°C	up to 8 metres depending on credential type, installation & surroundings
Serial Interface Converters (SIC)	59 x 41.5 x 14		IP20	10...30VDC/ 40 mA	SIC1: Open Collector *(wiegand, D/C, magstripe)* SIC2: RS485 *(various bi-directional)* SIC3: RS232 *(various- bi-directional)*	-20°C..+60°C	

Transponder Type : Format (Frequency/Chip Technology)	Dimension (mm)	Protection Type	Operating Temp	Material	Reading Distance
Card transponder					
TPG 5501 : 32 bit Fixcode (2.45GHz) TPG 5502 : 32 bit Fixcode w/Dual Technology (2.45GHz + 125KHz) TPG 5505 : Dual Technology (2.45GHz/125KHz HID) TPG 5601 : OTP customised (2.45GHz) TPG 5603 : Dual Technology (2.45GHz/13.56MHz Mifare) TPG 5604 : Dual Technology (2.45GHz/13.56MHz Legic) TPG 5606 : Dual Technology (2.45GHz/13.56MHz HID i-Class)	85 x 54 x 6	IP54	-25°C..+60°C	ASA	8 metres*
Heavy duty transponder					
TPG 6501 : 32 bit Fixcode 2.45GHz TPG 6601 : OTP customised (2.45GHz) TPG 6603 : OTP customised w/Dual Technology (2.45GHz/13.56MHz Mifare)	100 x 60 x 8.5	IP67	-25°C..+60°C	PC/ABS	8 metres*

Specifications subject to change without notice

** The reading distance can be affected by vehicles fitted with heat reflecting materials or anti-solar film like Vkool, etc.*

Dealer

Specifications subject to change without notice 07/10

TPG Transponders for 2.45GHz Readers

Card

The TPG5xxx series transponder range is designed to be used along with the TSG60DB. It comes in standard 32 bit fixcode format or customisable format from 26 bit to 64 bit. A special technology allows a long battery lifespan of 5 years plus.

Heavy Duty

The heavy duty TPG6xxx us ideal for industrial and logistics applications, i.e tracking of truck containers and trailers. It can be mounted directly onto metal surfaces or any other metallic material.