

Sensor-Unit Manual

fp-eGATE

Version June. 07 Revision 1.1

Description

The fp-eGATE System works stand-alone without the need of a PC. The fp-eGATE System can connect to a PC as a host via RS232C or via RS485 network. The fp-eGATE System is simple to use for home door and/or garage locks in one-family or multiple-family houses and companies up to 9000 employees.

The fp-eGATE System is an innovative fingerprint system offering unparalleled performance for physical access control using an award winning fingerprint recognition algorithm. Industry's fastest identification speed of fp-eGATE System eliminates the need of keys, cards or Pin's even for large enrolments of more than thousands of users.

As a stand-alone fingerprint identification system, the Sensor-Unit integrates fingerprint capturing, processing, identification and storage in one system.

Sensor-Unit is an advanced biometric access reader equipped with award winning fingerprint recognition engine for fast one-to-many fingerprint identification. Enrolled with more than hundreds of users, identification can be done in less than one second. The Sensor-Unit provides a thermal sweep fingerprint sensor.

The Sensor-Unit consists of an embedded fingerprint identification module with a 400 MHz DSP, memory for **9000** user and the Thermal-Sweep-Sensor and provides one RS232C and one RS485 interface, three digital OUT ports, two digital IN ports, 12V DC power and one tamper switch. Wire connection by terminal clamps.

Technical Description

Sensor-Unit

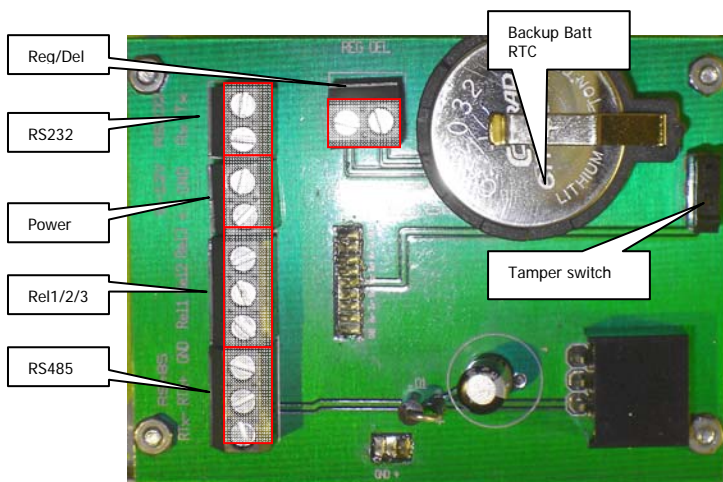
Power:	9-12V DC/0,180 Amp.
Operating Temperature:	-15 C ~ +50 C
Dim:	98 (L) x 64 (B) x 40 (H) mm

Mounting

- Open the lid with the four screws of Sensor-Unit plastic case.
- The lid contains the embedded board and the thermal-sweep-sensor. Be careful against electrostatic.
- Drill two holes for fixing the under part of the plastic case for dowel pins.
- Suggested mounting position from ground is 150 mm!
- Drill one hole for lead the cable through wall for wall entrance.
- Drill one hole in the near of the terminal clamp for lead the cable through the under part of the plastic case.
- Attach cable to terminal clamp
- Mounting the under part of the plastic case on the wall (fit the holes).
- Fix the lid in a correct position. The tamper switch should get closer.

Connecting wires

Clamp	eGATE	Description
1 x RS-232	Tx	Serial Connection
1 x RS-232	Rx	Serial Connection
1 x Power	9-12V DC	Power
1 x Ground	GND	
1 x digital OUT	Rel1	Relay 1
1 x digital OUT	Rel2	Relay 2
1 x digital OUT	Rel3	Relay 3
1 x digital IN	REG	Registration key
1 x digital IN	DEL	Delete key
1 x R-S485	TRx -	Serial Connection
1 x R-S485	TRx +	Serial Connection



See [Central-Unit_Wiring Guide_EN.pdf](#) for more information about wiring and settings.
 See also [BioAdmin_Manual_EN.pdf](#) for more information about BioAdmin Software.

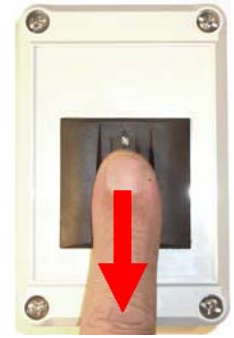
Operating Sensor-Unit:

After correct wire connection, the Sensor-Unit yellow LED is on.

1. Sensor-Unit **without** any Relay controller

- Connect Sensor-Unit via RS232 or via RS485 and a "RS485-to-RS232 Converter" to a PC.

For connection, registrations, and delete of user, see BioAdmin_Manual_EN.pdf software manual.



2. Sensor-Unit **with** Mini-Controller

- For connection of Sensor-Unit to Mini-Controller, see Mini-Controller_Manual_EN.pdf

User Registration

For user registration press **REG** key for **2 seconds** at the Mini-Controller

- the Sensor-Unit LED flash **5 times green**
- sweep your Finger over the Sensor area
- the Sensor-Unit LED flash **5 times green**
- sweep your Finger again over the Sensor area

- If registration successful, the Sensor-Unit LED flash **green** for **2 seconds**
- If registration failed, the Sensor-Unit LED flash **5 times red**
In this case, try again.

User Delete

For user delete press **DEL** key for **2 seconds**

- the Sensor-Unit LED flash **5 times red**
- Sweep the Finger for deleting over the Sensor area
- If deletion is successful, the Sensor-Unit LED flashes **red** for **2 seconds**.

Important: Delete user selective by the user-ID without the need of finger with BioAdmin Software. See BioAdmin_Manual_EN.pdf

3. Sensor-Unit **with** Central-Unit/BEACon

See Central-Unit_Wiring Guide_EN.pdf and BEACon_Operation_Manual_V2.0.1.pdf

Normal Operating:

After registration of one or more of user fingerprints the Sensor-Unit is ready for operating. Sweep your finger **flat** over the sensor area. If the identification processes are successful if the Sensor-Unit LED flashes **green** for **2 seconds** and the relay will be active for **3 seconds**.

Otherwise, the Sensor-Unit LED flashes **red** for **2 seconds**. In this case, try again.

BioAdmin Software

The BioAdmin Software enhanced the function of fp-eGATE. Therefore we suggest using the BioAdmin Software once after install the system for enrolment, time zone setting and duress finger if this function is needed.

D / Sicherheitshinweise.

Die Bedienungsanleitung gehört zu diesem Produkt. Sie enthält wichtige Hinweise zur Inbetriebnahme und Handhabung. Achten Sie hierauf auch wenn Sie dieses Produkt Dritte weitergeben. Dieser Bausatz ist nicht für Personen unter 14 Jahren bestimmt (er hat keine CE Abnahme als Kinderspielzeug). Setzen Sie diesen Bausatz keinen hohen Temperaturen, starken Vibrationen oder Feuchtigkeit aus. Die Inbetriebnahme ist von entsprechend qualifiziertem Personal durchzuführen, damit der sichere Betrieb dieses Produktes gewährleistet ist.

Die Betriebsspannung darf nur einer Batterie oder einem auf Sicherheit geprüften Netzteil entnommen werden. In gewerblichen Einrichtungen sind die Unfallverhütungsvorschriften des Verbandes der gewerblichen Berufsgenossenschaft für elektrische Anlagen und Betriebsmittel zu beachten. In Schulen, in Ausbildungseinrichtungen, Hobby- und Selbsthilfwerkstätten ist das Betreiben dieses Gerätes durch geschultes Personal verantwortlich zu überwachen. Plazieren Sie das Gerät niemals in der Nähe von brennbaren, bzw. leicht entzündlichen Materialien (z.B. Vorhänge). Bei Sach- oder Personenschäden, die durch Nichtbeachten der Bedienungsanleitung und dieser Sicherheitshinweise verursacht werden, sowie für deren Folgeschäden übernehmen wir keine Haftung.

E / Instrucciones de segundad.

Las instrucciones de servicio pertenecen a este producto. Contienen indicaciones importantes para la puesta en servicio y el manejo. Prestar también atención a esto al pa este producto a terceras personas. Este kit no es determinado para personas menor de 14 años (no tiene ninguna homologación CE como juguete). Nunca exponer este kit a altas temperaturas, fuertes vibraciones ni a la humedad, La puesta en servicio se debe efectuar por personal calificado para garantizar el servicio seguro de este producto. La tensión de servicio solamente debe tomarse de una batería o una fuente de alimentación probada por seguridad. En esta blecem ientos industriales se deben observar las instrucciones para prevenir los accidentes de ia asociación profesional industrial para las instalaciones eléctricas y medios de producción. En escuelas, centros de formación profesional y en talleres de hobby y de autoayuda, el servicio de este aparato se debe vigilar de responsabilidad por personal enseñado. Nunca poner este aparato cerca de materiales fácilmente inflamables (p.ej. cortinas). Declinamos toda responsabilidad de daños materiales o personales que resultan de la inobservancia de las instrucciones de servicio o de las instrucciones de seguridad a como de sus daños siguientes.

F / Instructions de sécurité.

Ces instructions de service appppartiennent à ce produit. Elles contiennent des renseignements importants pour la mise en marche et le maniement. Veuillez faire attention ceci quand vous transmettez ce produit à une troisième personne. Ce lot n'est pas déterminé pour les personnes à moins de 14 ans (il n'a pas d'inspection CE comme jouet d'enfant). Ne jamais exposer ce lot à hautes températures, aux fortes vibrations ni à l'humidité, Il faut que la mise en marche soit effectué par du personnel qualifié pour garantir l'opération sûre de ce produit. La tension de service doit être seulement prélevée d'une batterie ou un bloc d'alimentation contrôle par sécurité. Dans les facilités industrielles, il faut considérer les règlements de prévoyance contre les accidents pour les installations électriques et les moyens de production de la caisse industrielle de prévoyance contre les accidents. Il faut que aux écoles, centres d'apprentissage, aux ateliers de hobby et d'effort personnel, le service de cet appareil soit contrôlé de responsabilité par du personnel formé. jamais placer cet appareil près des matières combustibles ou facilement inflammables (p.ex. rideaux). Nous déclinons toute responsabilité des dégâts matériels ou des dommages corporels résultant de la inobservance de ces instructions de service et les instructions de sécurité ainsi que des dommages de conséquence.

GB / Safety instructions

These operating instructions belong to this product. They contain important instructions for operation and handling. Please keep this in mind when passing the product on to another person. This kit is not intended for persons under 14 years (it has no CE approval as a children's toy). Never expose this kit to high temperatures, strong vibrations or humidity. Setting into operation has to be done by adequate qualified personnel in order to guarantee the safe operation of this product. The operating voltage may only be drawn from a battery or power supply unit tested for safety. The regulations for prevention of accidents for electrical installations and operating material of the industrial employer's liability insurance association are to be observed industrial facilities. In schools, training centres and do-it-yourself workshops, the operation of this appliance is to be supervised reliably by trained personnel. Never place the appliance close to combustible or inflammable materials (e.g. curtains). We do not assume any liability for material damage or personal injury caused by non-compliance with the operating instructions and these safety instructions as well as for consequential damage.