

1 GENERAL INFORMATION

1.1 Product description

The GemEasyLink/Access3xx device is a contactless proximity card reader combining both the reader and the antenna in one small package. Its main application is access control. There is tow sort of packaging, with and without case.

The GemEasyLink/Access3xx reader is powered by an external 12Vdc power supply.

The unit utilizes the MIFARE® technology as part of its integrated solution. The device also provides both audio and visual feedback with an internal beeper and LED indicators. The GemEasyLink/Access3xx contactless reader can communicate to the Personal Computer via the Wiegand port.

The directly matched antenna (PCB loop antenna) is tuned in the factory at 13.56 MHz.

For more information, see product's data sheet at section 1.6.

1.2 Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

1.3 Tested System Details

The FCC IDs for all equipment, plus description of all cables used in the tested system are :

Trade Mark – Model Number (Serial number)	FCC ID	Description	Cable description
GEMPLUS GemEasyLink/Access 300xx* (sn: 002)	MES680SGEL	Contactless smart card reader	Shielded cable with ferrite on the cable at 45cm from the device.
GEMPLUS (D215302D)	none	Contactless Smart card with ship PHILIPS	none
Dell Latitude CPI PN: 0006692D-12800- 03T-3722 (sn: VSRW6) with AC adaptor block 9364U	Doc. Of Conf.	Personal computer	All data cables are unshielded Power cable unshielded
Logitech 334684-007 (sn: F362A0G5BJJ32JV.AW)	JNZ201013	Mouse	Unshielded cable
HITRON HERO48-316 (sn: 001)	none	Power supply of contactless reader	Unshielded cable
Gemplus HWP 107706A (sn: none)	none	Interface RS232/Wiegand	Shielded cable for wiegand Unshielded cable for RS232 and power
Comatec AL0030.090.15 (sn: none)	none	Power supply of interface	Unshielded cable

*Equipment Under Test

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992, CISPR22-1993/A1:1995/A2:1996 and EN55022:1994/A1:1995/A2:1997.

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.5 Test facility

Tests have been performed on March 13th, 2000.

The test facility used to collect the radiated and conducted data is the SMEE Actions Mesures facility, located ZI des Blanchisseries, 38500 VOIRON, France. This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4-1992 in a letter dated August 04, 1999 (registration number 94821).

This test facility has also been accredited by COFRAC (French accreditation authority for European union test lab accreditation organization), accreditation number 1-0844 as compliant with test site criteria and competence in EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.

1.6 Data sheet of the product

GemEasyLink/Access3xx User's GUIDE

General overview

The GemEasyLink/Access3xx device is a contactless proximity card reader combining both the reader and the antenna in one small package. Its main application is access control.

The unit utilizes the MIFARE® technology as part of its integrated solution.

The device also provides both audio and visual feedback with an internal beeper and LED indicators.

The GemEasyLink/Access3xx device is available in a rugged IP65 rated enclosure for direct mounting (GemEasyAccess3xx) or as an OEM version (GemEasyLink3xx) for packaging in a user supplied environment.

The main features of the GemEasyLink/Access3xx device are:

- Versatile package with easy connection allowing the card reader to be included in equipment mounted indoors or outdoors and on a variety of surfaces,
- Front mounted multicolor LED and beeper indicate status and error information,
- Standard input / output.

This user's guide includes information on the operation of GemEasyLink/Access3xx device.

A typical application is depicted in figure 1:

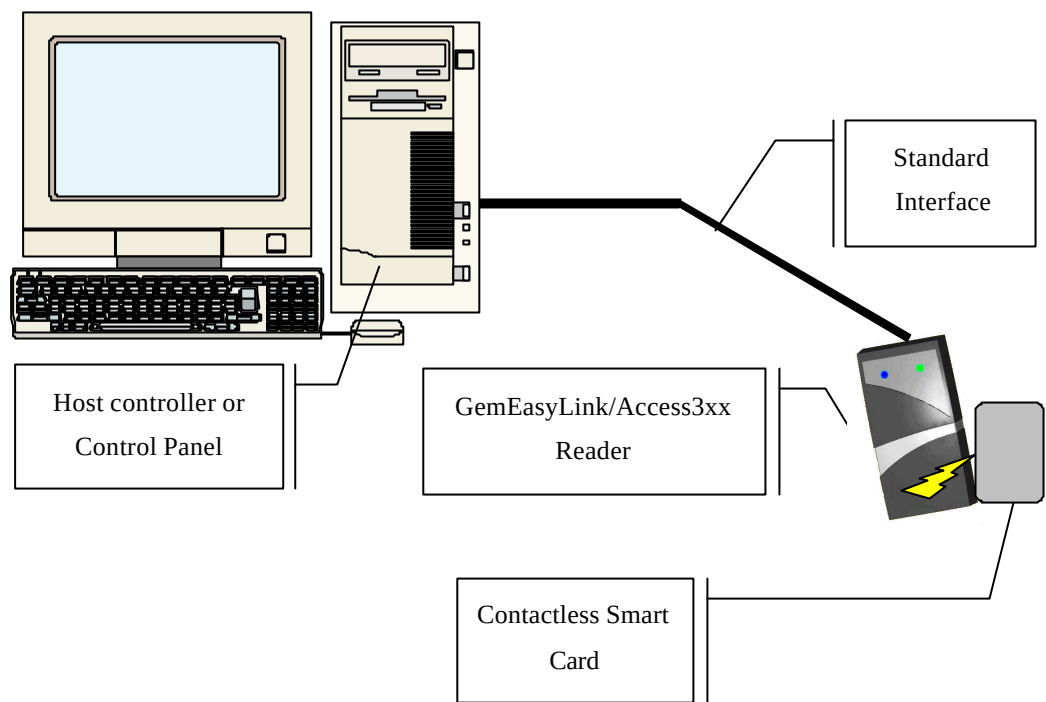


Figure 1: GemEasyLink/Access3xx typical application

GemEasyAccess3xx Overview

The packaged device is composed of a small package including a reader and an antenna:

- Front side:
- A blue LED indicator and a bicolor LED indicator,
- Rear side:
- User cable for connection and adhesive fixing.

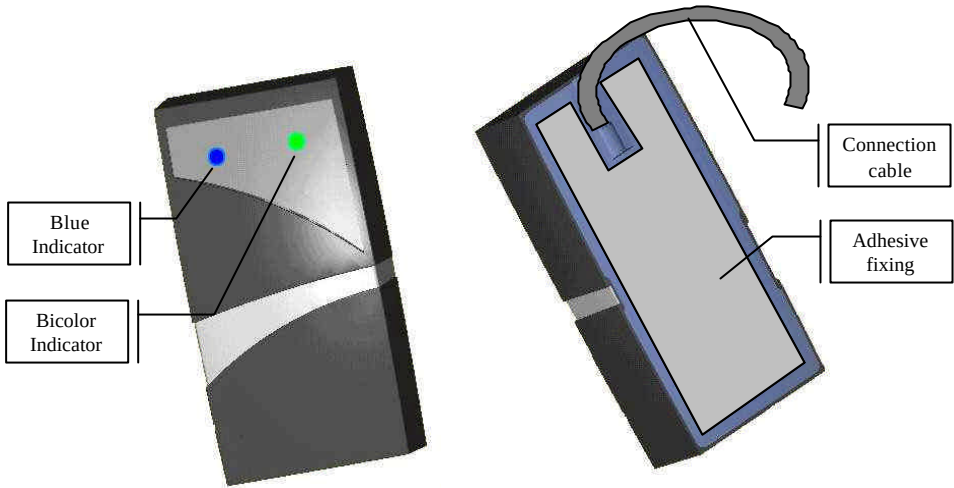


Figure 2: GemEasyAccess3xx Mounting and Indicator Reference

- The cable is dedicated to the user connection.
- The adhesive is used to fix the device to a wall.
- The blue indicator is related to device activity.
- The bicolor indicator is related to access control activity.
- An internal beeper is used as audio indicator.

GemEasyLink3xx Overview

The OEM device is composed of two assembled boards (Antenna & Reader) with the following user indicators and connectors:

- Top side
- A blue indicator and a bicolor indicator,
- Bottom side
- Four groups of terminal block connectors.

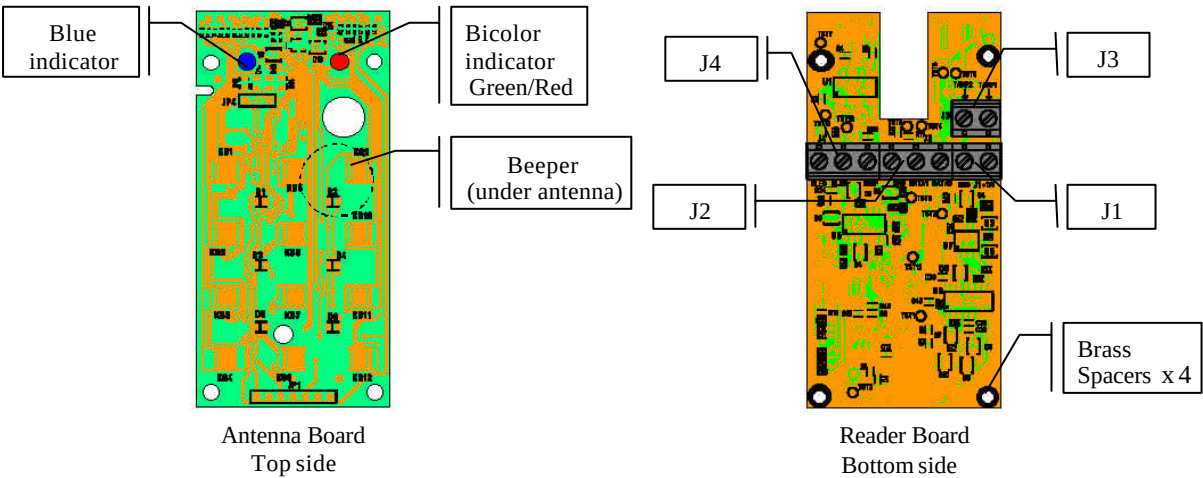


Figure 3: GemEasyLink3xx User Interface Component Locations

- The terminal blocks are dedicated to user connections.
- The blue indicator is related to device activity.
- The bicolor indicator is related to access control activity.
- The internal beeper is used as audio indicator.

Product features

The GemEasyLink/Access3xx device offers the following features:

- Up to date architecture,
- The ability to communicate with any type of ISO14443A contactless smart card,
- The ability to transmit smart card secured information,
- Standard +12 V operation,
- A friendly user interface with three LEDs and a beeper,
- Built-in tamper switch.

Technical Specifications

The GemEasyLink/Access3xx device provides and requires the following conditions for optimal operation.

Operating Temperature range	-20°C to +70°C (-4°F to 158°F)
Humidity Range	0% to 95% non condensing
Index of protection	IP00 (open case reader) / IP65 (packaged reader)
Physical dimensions	82 mm (Height) x 40 mm (Width) x 22 mm (Deep) for open case reader 88 mm (Height) x 46 mm (Width) x 19 mm (Deep) for packaged reader
Cable	AWG24 wire
Power Supply Voltage	+12 V (+8 V to +13 V)
Power Supply Current	< 150 mA for +12 V power supply voltage.

Table 1: GemEasyLink/Access3xx Technical Specifications

Wiring diagram

An example of wiring diagram is depicted in Figure 4:
In this example, when the door is required to open, the green indicator and the beeper are activated.

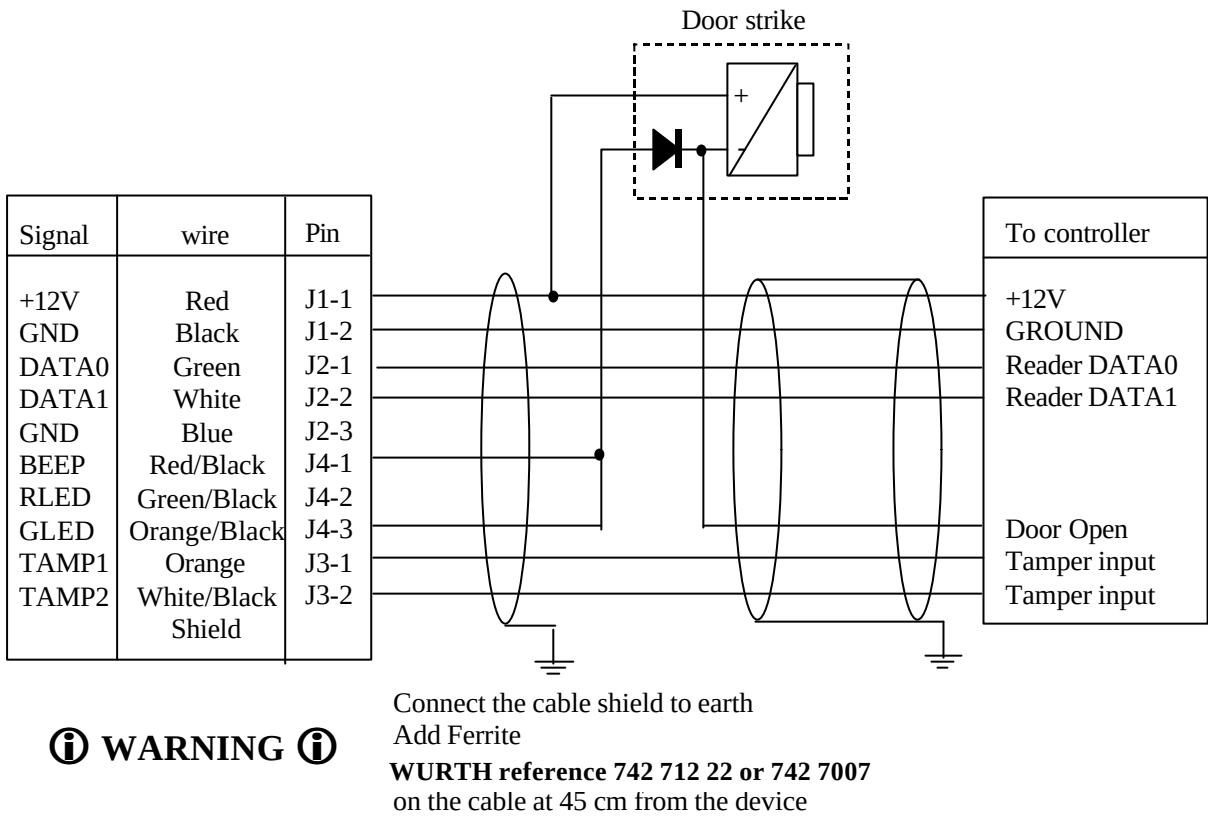


Figure 4: Example Wiring Diagram