

## Safety precaution notes

The common safety precautions that apply to mobile phones must also be observed at all times when using this Concept Shield. Failure to comply with these precautions violates safety standards. Gemalto M2M assumes no liability for customer's failure to comply with these precautions.

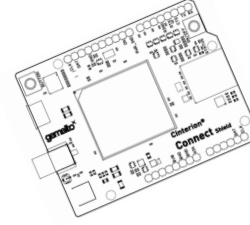
The following is a non-extensive list of the mobile phone and Connect Shield usage restrictions: Pacemaker patients are advised to keep their hand-held mobile away from the pacemaker while it is on. Mobile phones must be switched off before boarding an aircraft. Mobile phones may not be operated in the presence of flammable gases or fumes. Interference can occur if mobile phones are used close to TV sets, radios, computers or inadequately shielded equipment. Do not use your mobile while driving a vehicle. You should never rely solely upon any wireless device for essential communications, for example for emergency calls.

## Regulatory compliance information

This Cinterion® Connect Shield is intended for use only in a laboratory test environment. All persons handling the Cinterion® Connect Shield must be properly trained in electronics and observe good engineering practice standards, including proper ESD handling.

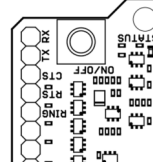
## Cinterion® Connect Shield

### First steps

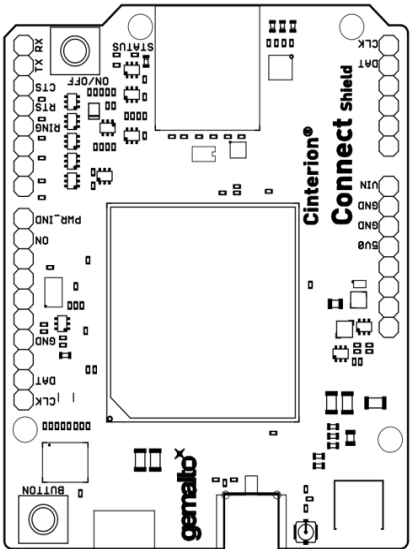


Important Note: See modem's Hardware Interface Description to configure the status of the LED.

ON/OFF BUTTON — STATUS LED	
Connect power (5V)	Status LED glows
Press ON/OFF button shortly	Status LED lights up
Status LED	Status LED flashing during network search, registration etc., depending on settings
Hold ON/OFF button >3s	Turns off Connect Shield and Status LED glows.



- > Download the installation package from <https://developer.gemalto.com/>
- > Connect the USB cable from the PC to the shield's USB socket
- > Start your Connect Shield with the ON button (short press).
- > Install the modem USB drivers from the ZIP file.
- > Go to the Device Manager to find the modem's COM Port number: Modems < Cinterion < Modem name > Java Debug Modem USB < Properties > Modem > Port
- > Open your favorite Terminal program, and connect to shield using these settings:  
> COM port number > 115200 bps, 8N1, CTS/RTS control, DTR on
- You can now start entering commands for the Connect Shield (plus CR+LF):  
> AT  
> Display product identification information
- For further commands read the modem's AT Command Set.

Shield I/F	Shield function	Shield DIR	Shield Interface (Connect Shield)	Shield I/F	Shield function	Shield DIR
	SCL	I	 <p>Keep in mind to use additional USB power [5V/1A] for higher modem current loads while transmitting data to prevent modem switch off.</p> <p>Power</p> <p>DRX Main &amp; Ant. Ant.</p> <p>Modem Module &amp; Port Button</p> <p>12C Temp. Sensor</p> <p>12C Light Sensor SIM Status ON/OFF</p> <p>12C Extender w/ Card LED Button</p> <p>3 LED</p> <p>Cinterione Connect shield</p> <p>gemalto</p>	SCL	I	
	SDA	IO		SDA	SDA	IO
	NC	-				
	IOREF	-				
	RESET	-				
	3.3V	I		PWR	PWR	I
	5V	I		PWR	PWR	I
	GND	PWR		GND	PWR	GND
	GND	PWR		GND	PWR	GND
	Vin	-				
A0	-	-				
A1	-	-				
A2	-	-				
A3	-	-				
SDA	SDA	IO				
SCL	SCL	I				

Shield I/F	Shield function	Shield DIR	
SCL	SCL	I	
SDA	SDA	IO	
AREF		GND	
GND	GND	GND	
SCK	-	-	
MISO	-	-	
MOSI	-	-	
CS	-	-	
D9	ON/OFF	I	
D8	PWR_IND	O	
D7	-	-	
D6	-	-	
D5	-	-	
D4	RING	O	
D3	RTS	I	
D2	CTS	O	
TX	TXD	I	
RX	RXD	O	