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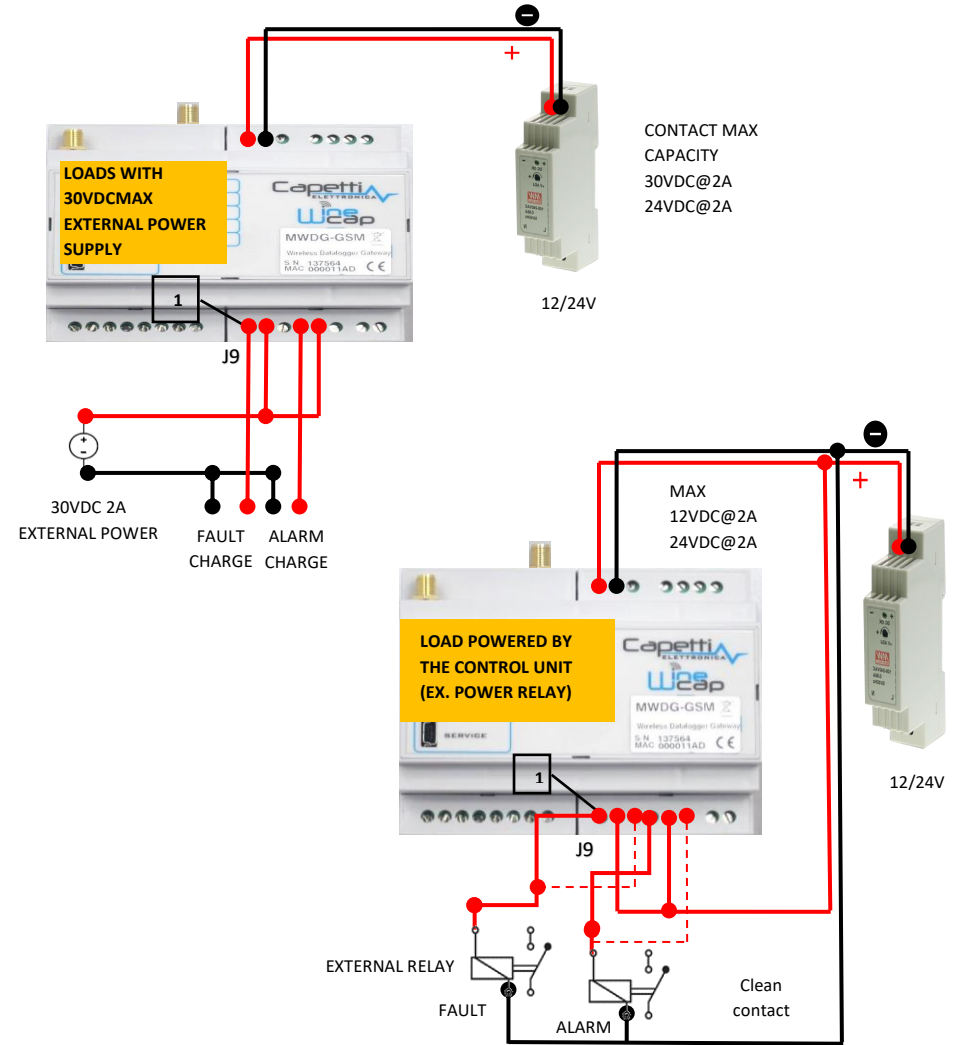# Quick Guide
MWDG-GSM-M1

System Components

- WSN Antenna ANT-EXT
- SIM Card
- GSM Antenna
- LED Indicators
- 12/24V
- HHDR1524 Power supply
- USB Cable
- WineCapManager

Connection Examples

LOADS WITH 30VDCMAX EXTERNAL POWER SUPPLY

CONTACT MAX CAPACITY
30VDC@2A
24VDC@2A

12/24V

J9

30VDC 2A EXTERNAL POWER

FAULT CHARGE

ALARM CHARGE

LOAD POWERED BY THE CONTROL UNIT (EX. POWER RELAY)

MAX
12VDC@2A
24VDC@2A

12/24V

J9

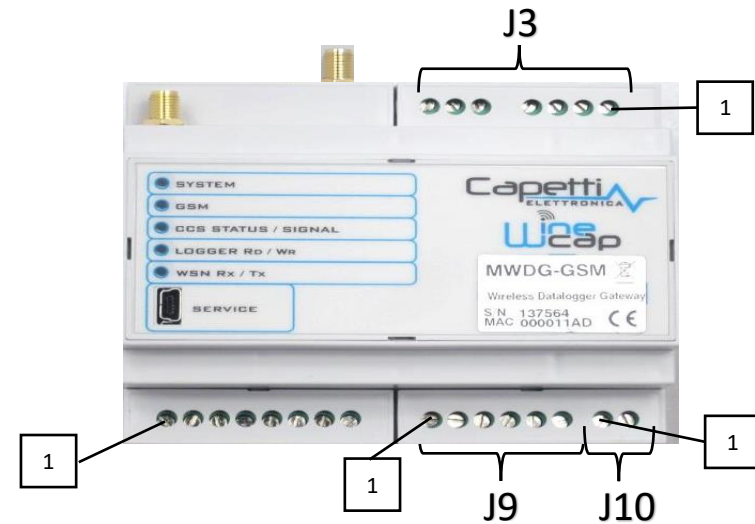EXTERNAL RELAY

FAULT

ALARM

Clean contact

2

R07

Service Center Connection

1. Insert a working SIM and configure the provider APN and related PIN using **W**ine**C**ap**M**anager.

2. GSM LED (*green*):

   a. 1 flash/sec: network searching

   b. 1 flash/4sec: signal ok

3. Connection test: issue to basestation command **4** using **W**inecap**K**ey. CCS Status LED turns on (*green*), at the end of the upload process, LED turns off

4. To verify on Service Center website: www.winecap.it **(valid account needed)**

Approach **W**inecap**K**ey in this point, wait for 4 amber flashes of the System LED then remove

Terminal Blocks

J3	Vin + Serial
1	NC
2	MB A+
3	MB B-
	GND
4	
5	P.E.
6	GND
7	12/24Vdc

J9	Relay
1	FAIL_NO
2	FAIL_COM
3	FAIL_NC
4	ALARM_NO
5	ALARM_COM
6	ALARM_NC

J10	Battery Backup
1	BATT_12V
2	GND

NO: Normally Open
NC: Normally Closed
The logic can be reversed by software setting to reduce the consumption of the device

Led Description

System	System indicator: • slow flash = OK • rapid flash = probe/datalogger enrolling
Logger	Memory status
CCS	Service Center connection: • switched on (*green*) = connection in progress • switched on (*red*) = connection error • flashing = GSM signal test
GSM	GSM communication: • rapid flash (*green*) = looking for signal • flashing (*green - 1 flash/4sec*) = GSM network OK • flashing (*red/green*) = GSM error
WSN	Wireless Sensor Network • green = measure reception • red = transmission in progress

Relay

Relay	The condition of a datalogger into the network makes relay commutes
Fail	Datalogger malfunctions: offline status or low battery (*number of dataloggers can be set*)
Alarm	Alarm threshold overstepping

WineCapManager

1. Launch *Setup.exe* from the **W**ine**C**ap**M**anager folder ed run the installation.

2. Launch **W**ine**C**ap**M**anager and select "*Local Connection*".

3. Wait for MWDG device detection.

4. Create a new database, insert a referring name, and click on "*open*".

5. Insert licence file located in the CD (*menu Basestation/Insert licence*)

6. Wait for the automatic alignment of the list and the status of sensors from MWDG to PC.

USB Driver

1. Connect USB cable to PC.
2. Access to *Control Panel/Device Manager* then click on MWDG device.
3. Manually install the USB driver (*MWDG_CDC.inf*) available on CD.
4. Click "*continue*" when requested
5. **Note** for WINDOWS 8.1: in case of troubles follow the "*Win8.x Installare Drivers USB R01.pdf*" manual available on CD.

At the end of the installation process, a new COM port will be installed: "*WineCap MWDG (CDC)*"

Start Sensors

1. Connect MWDG as shown before, power up and verify Led "*System*" flashing
2. Activate the probe/datalogger:
   a. approach **W**inecap**K**ey
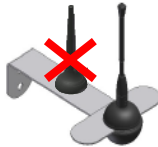   b. wait for 2 flashes (*test*)
   c. remove **W**inecap**K**ey

3. Verify LED:

Flash count - Wireless mode		Status/Radio signal quality
	5 green flashes	Excellent
	4 green flashes	Good
	3 green flashes	Fair
	2 amber flashes	Sufficient
	1 red flash	Insufficient
	1 red flash 2" long	OUT OF RANGE Network searching
	2 red flashes 2" long	STANDBY
	Short-long-short red flashes series	FACTORY RESET Device not enrolled

How to Install

Guidelines to follow during the system installation process

1. Position to the selected location and power on the MWDG

   a. select, if possible, a central position among to the wireless plant

   b. avoid metal obstructions and reinforced concrete structures

   c. verify the GSM signal
      WSN and GSM antennas distance must be >50cm

2. Move the probe/datalogger to the measure location

   a. verify received signal
      important: small movement can improve the radio signal quality

   b. outdoor probes must be placed upward and north oriented to avoid tampering

3. Adding repeaters to improve radio coverage

   a. couple a repeater to the systema and write down assigned address

   b. position it upward among obstacles and people

   c. select a "strategic" point among the plant

4. Using the WD04T tester probe

   a. couple the probe to the system

   b. activated the test, the probe displays the percentage of the radio signal level

   c. Declares the radio reference in a specific point: router address or zero for MWDG

Manual: Refer to "WINECAP User Manual.pdf" located on CD for further instructions regarding the network and the installation process.