WHC

www.promax.it

User Manual

Rev. 1.00.5

1 General

The remote WHC system, allows to control the machine in wireless or wired mode.
WHC is used with IsoUs.

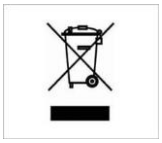
WHC/0 and WHC/1 are equipped with an integrated battery charger with 200 Vac adapter

Brochure

THE SYSTEM WIFI USES AN INTEGRATED LITHIUM BATTERY
THEREFORE, FOR THE CORRECT USE, A REGULAR RECOVERY IS REQUIRED
DURATION OF BATTERY, IN NORMAL CONDITIONS OF USE IS ABOUT A DAY
THE BATTERY CHARGE IS INTEGRATED AND A 200 VAC ADAPTER IS PROVIDED FOR RECOVERY.
THE CHARGING TIME OF BATTERY FROM 0% TO 100% IS MORE OR LESS 4:30 HOURS

CONNECTION WITH WIFI IS LIMITED BY USE OF CONDITIONS OF USE
NORMALLY IN THE OPEN FIELD THE RANGE OF ACTION IS ABOVE 30 Mt, BUT CAN REDUCE IN CASE OF OBSTACLES.

THE SYSTEM IS PROTECTED FROM LOSS OF CONNECTION, PUTTING THE SAFETY MACHINE



WARNING
DISPOSE THE BATTERIES IN SPECIAL CONTAINERS

WARNING
DON'T USE 200Vac ADPATER DIFFERENT THAN THOSE SUPPLIED

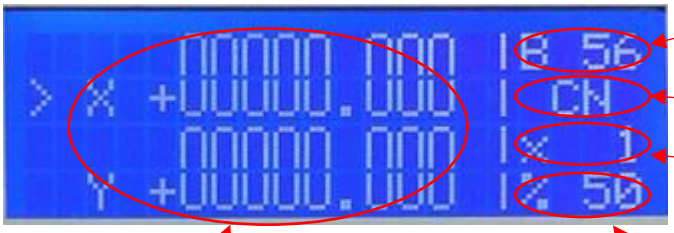
WARNING
WHC DOES NOT HAS A EMERGENCY BUTTON

2 WHC


WHC
00000.000
B 56
> X +00000.000
CN
00000.000
1
Y +00000.000
50
PROMAX
F1
F2
F3
F4
X
C
Y
B
Z
A

2.1 Display

The Display show some informations of Machine State:



Battery charge

CN Connection

HandWheel Multiplier Setted x1 x10 x100

Feed Axes Override

Axes Values
Is always showen the Axis select.
For change the show mode press at same time the buttons:
and

If the machine is in ALARM MODE; the display will show the ALARM status

The Display will turn off automatically after 5 min of inactivity

2.2 Buttons

Select the Axis for JOG – Press the desired AXis


JOG Axis selected


Increase/Decrease Handwheel multiplier value x1 x10 x100


Turn On the Display. Press for 3 Sec for the Turn off the display


START Run the Gcode loaded in IsoUs – IsoDr


PAUSE Gcode

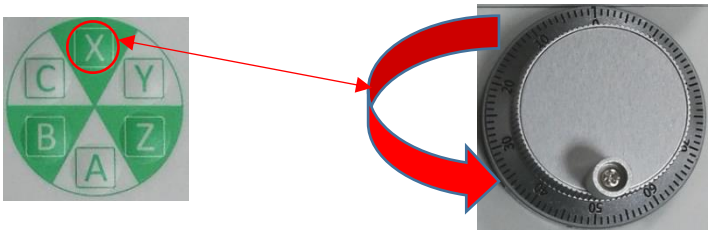

STOP Gcode

The Buttons F1-F4 can be customized for special functions.

See PlugIn HwManager

2.3 HandWheel

The Handwheel (if inserted) allows to a precise Axis motion.
The HandWheel has 100 p/r and the movement quantity is select from the multiplier x 1 x10 x100 selected.
For move the Axis is necessary press and hold the relative Axis Button and rotate the Handwheel:



2.4 Feed OVERRIDE

The Override potentiometer, allows to set the Axes Feed.

3 WHC connection on Promax CN

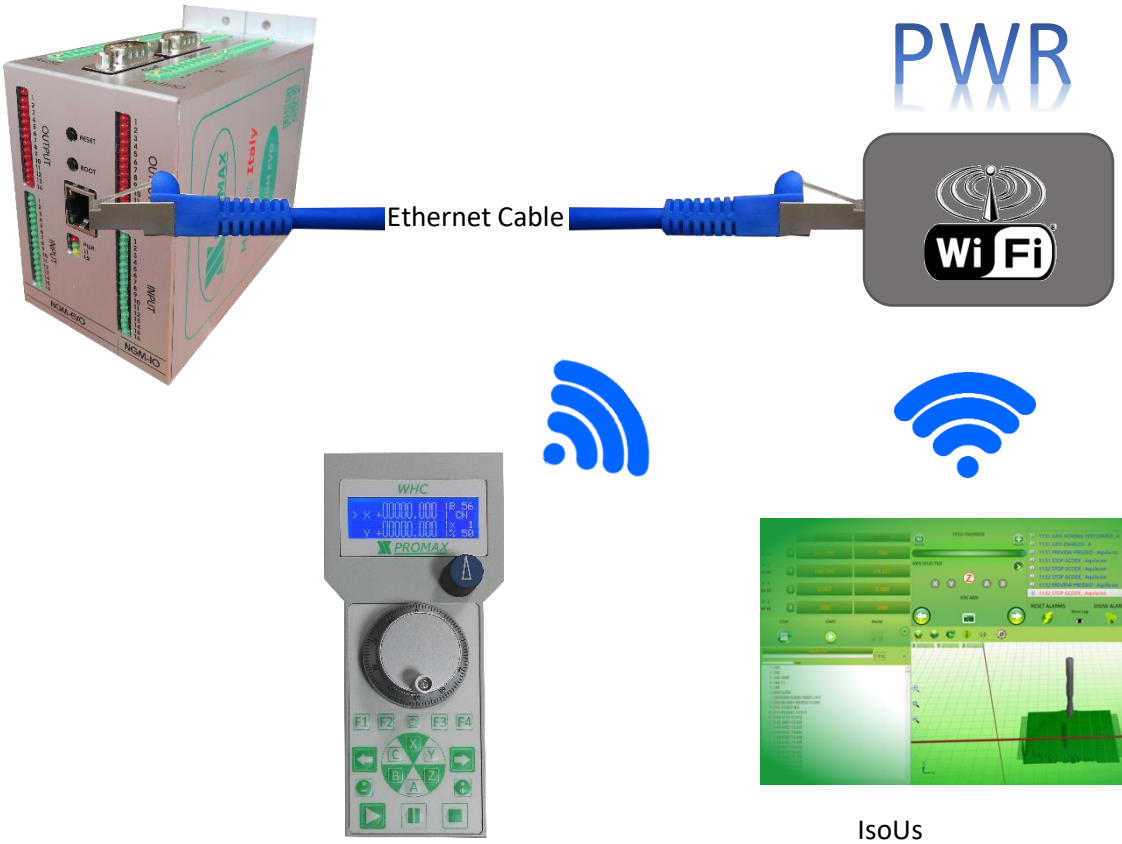
For connect the WHC/0 and WHC/1 in WiFi to Promax CN is necessary the accessory Promax PWR (Promax WiFi Router)
This is a WiFi Router that allows to connect the Promax CN.

PWR Credentials

NetWork Name – Promax.-WiFi-Router
IP Address – 10.0.0.254
Password - 0571684620

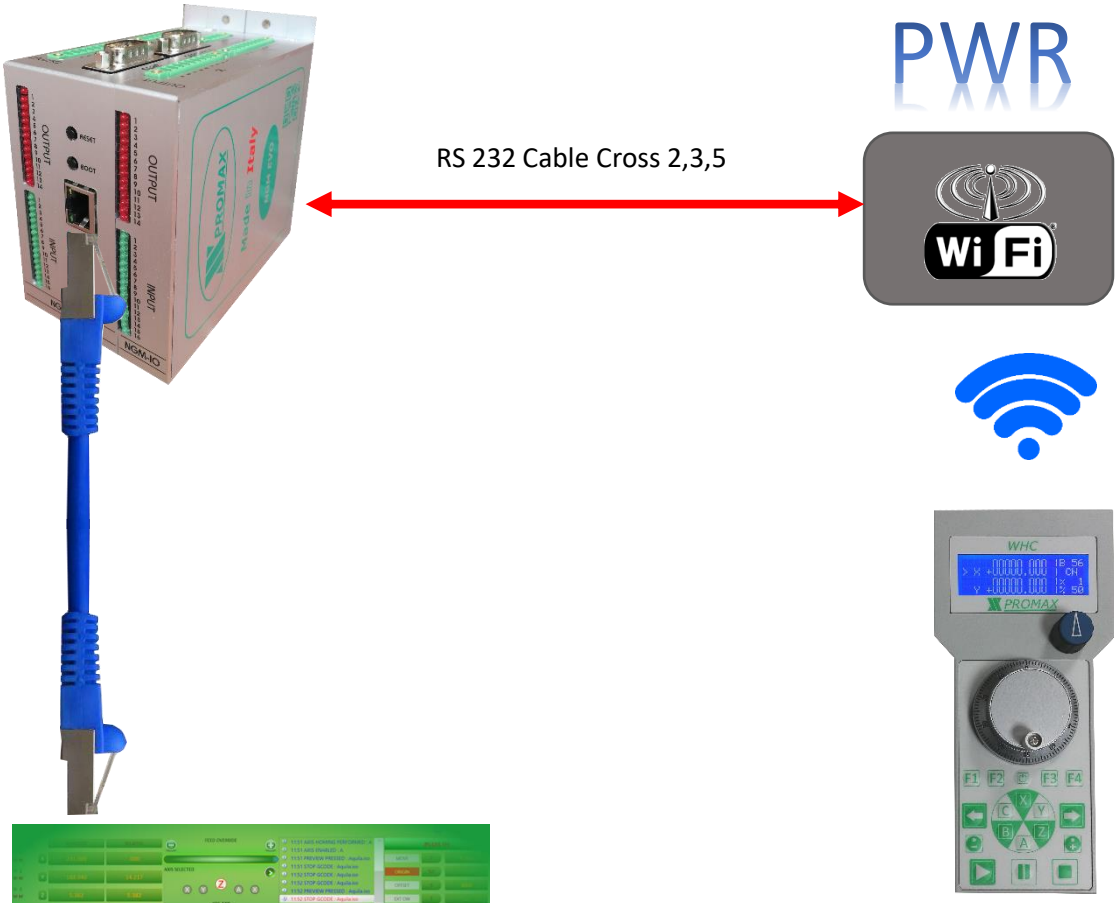
The WHC System is already set for an automatic connection with PWR

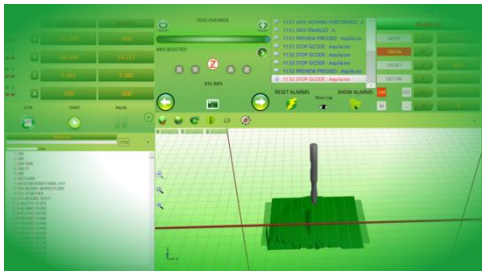
Connect PC and WHC in WiFi – CN in ETHERNET



IsoUs
The PC must have a WiFi
Connection to PWR

Connect PC in ETHERNET and WHC in WiFi – CN in RS232

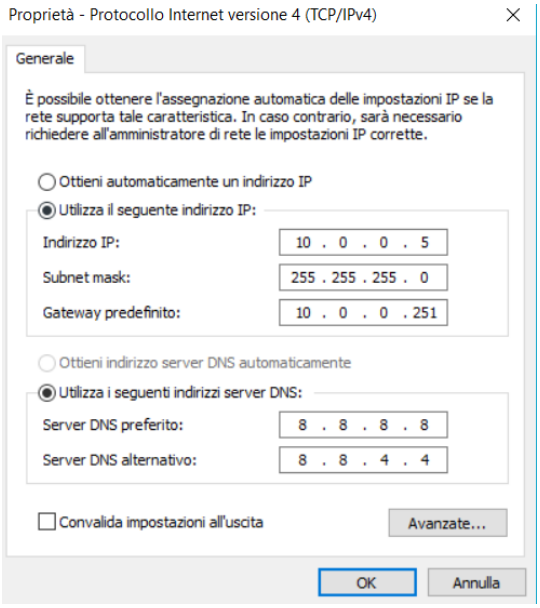




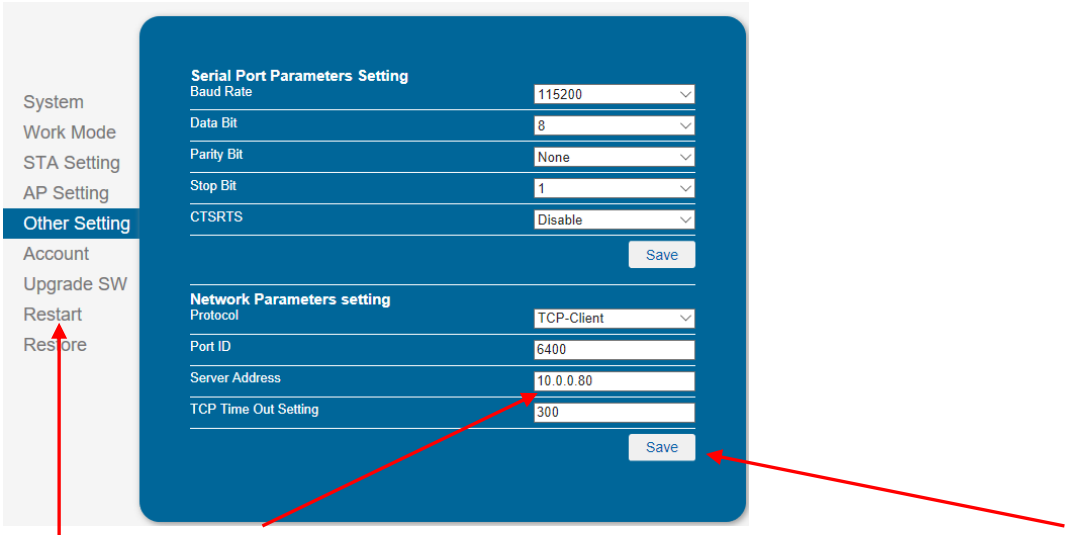
IsoUs
Il PC must have an
Ethernet RJ45 port

For enable yhe connection from PWR and CN in RS232 see followin:

1) From a PC WiFi set the static IP address eg 10.0.0.5
   The gateway isn't necessary



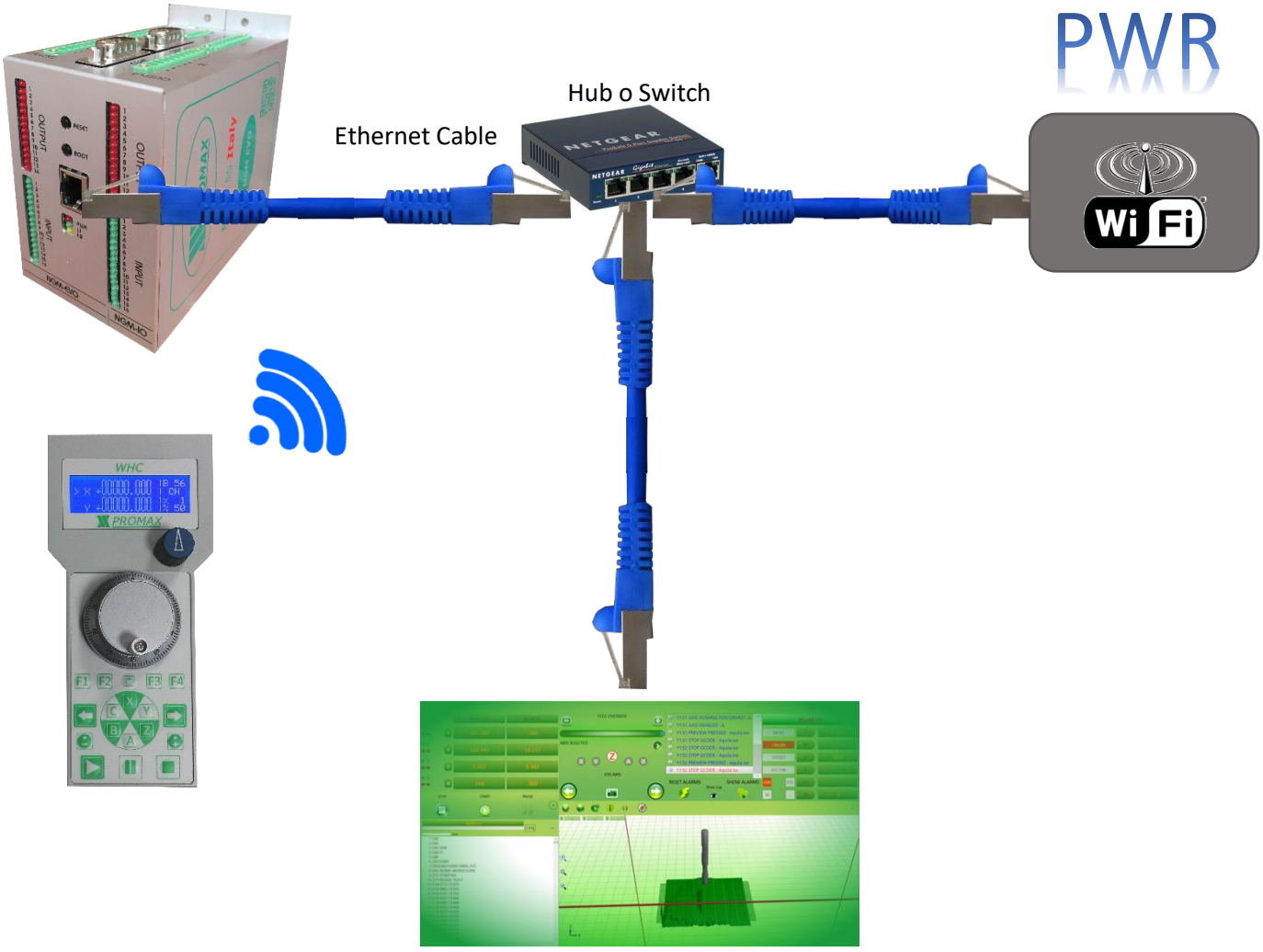
2) Turn On the WHC and wait more or less 20 Sec
3) From Browser Internet put the address **10.0.0.180**
4) User Name: **admin** Password: **admin**
5) Select **"Other Settings":**



6) Insert server address address 10.0.0.254 instead of 10.0.080 and press Save
7) Press Restart and Ok

Is necessary to change the OBJECT in the VTBII Application

Connect PC with cable RJ45 and WHC in WiFi CN in ETHERNET



IsoUs
Il PC must have an
Ethernet RJ45 port

4 Connection WHC to more machines

WHC can be connect to more machine, the machines must have the i Router WiFi with differente SSID (network name) and all must have the same PassWord.

For connect WHC see the following procedure:

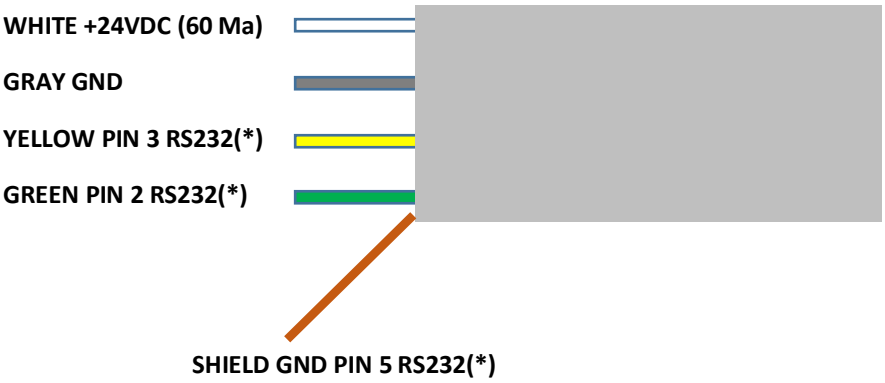
1) Turn Off the l WHC with button ON/OFF 
2) Press and Hold the Button and turn ON the WHC with ON/OFF button
3) WHC will scan all networks available in the range. At finish all networks will be show
4) Choose the network desired by buttons **+** and **-** 
5) With F2 Button is possible change the IP Address (only last number) with buttons + and – select the desired IP
6) Select the network with button  The WHC will be connect to new machine

For procedure abort, press ON/OFF

4.1 Connection by Cable

Connection WHC/2 and WHC/3 To Promax CN by CABLE

CABLE Pin Out:



(*) **RS232 NGWARP=J5**
RS232 NGMEVO e AG-EPC32 = J11

WARNING

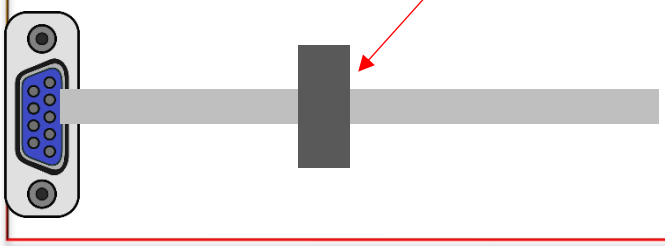
CONNECT ALWAYS THE SHIELD TO GND

WARNING

THE CABLE HAS AN EXTENSION MAX OF 8 Mt
DO NOT EXCEED

WARNING

THE RS232 CONNECTORS OF CN NOT ARE ABLE TO SUPPORT THE CABLE FORCE DURING EXTENSION, IS NECESSARY TO BLOCK THE CABLE IN DIFFERENT POSITION



5 Recharge and battery life

5.1 Recharge time

The charging time from 0% to 100% is more or less 4 Hours and 30 minutes

5.2 Battery Duration

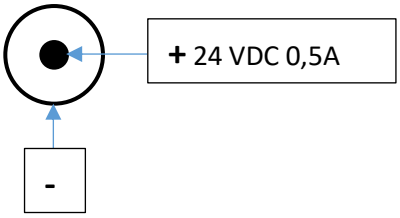
The duration , in normal conditions of use, is about 24 hours

The duration in stand by (WHC off) is about 48 hours.

WARNING
EVEN WHNE TRUNED OFF,WHC MAINTAINS THE WIFI MODULE ON (with low power).
THEREFORE THE BATTERY IS USED LIMITING THE DURATION ABOUT 48 HOURS.
RECOMMENDED TO MAINTAIN ALWAYS UNDER CHARGE THE WHC

6 PWR Connection

6.1 Power



6.2 RS232

PWR NGSYSTEM SER2

2----------3

3----------2

5----------5

7 Notes on the CE legislation

We have two directives about electronic devices, regarding the **WHC**: the 2006/42/CE (machine directive) about safety use of the devices and 2004/108/CE about electromagnetic compatibility.
About the first (machine directive), electric/electronic devices must complies the Union harmonisation legislation (Low Voltage Directive), Directive 2006/95/EC (until April 19th, 2016) and Directive 2014/35/EU (from April 20th, 2016) but it can be applied on devices supplied at 50-1000Vac or 75-1500Vdc **WHC** works at a voltage of 24Vdc (thus Intrinsically “safe”), so it belongs to "very low voltage" devices (class 0 legislation CEI 11.1), on which it isn't no legislation about.

On electromagnetic compatibility, regarding the Union harmonisation legislation Directive 2004/108/CE (until April 20th, 2016) and Directive 2014/30/EU (from April 20th, 2016), the device can be considered inherently benign in terms of electromagnetic compatibility because its inherent physical characteristics are such that:
a) it is incapable of generating or contributing to electromagnetic emissions which exceed a level allowing radio and
telecommunications equipment and other equipment to operate as intended;
b) it will operate without unacceptable degradation in the presence of the electromagnetic disturbance normally present in its intended environment
Moreover, this device cannot be classified as a "finished appliance with an independent functionality", due the **WHC** haven’t any use outside a complex electromechanics system, the machine electric board, made by a manufacturer in an industrial ambit and not by a final user.
Thus, it hasn’t any certification duty.

PROMAX however, can institute some specific measure as a pre-compliance, in case of particular demands of costumers, regarding the device electromagnetic characterization.
For example, can be made some measure under the CEI EN 61000-6-1 norm (2007 generic norms – residential, commercial and light industrial ambient immunity) or CEI EN 61000-6-1 (2007 generic norms - residential, commercial and light industrial ambient emission)

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