

User's handbook  
Digital radio link

**EK-MFR/1**

EK-PWS/11 board  
EK-PWS/12 board  
EK-PWS/13 board

## REGULATORY COMPLIANCE (USA)

This equipment requires licensing for operation under FCC Title 47 part 101

This equipment generates, uses and radiates electromagnetic fields that could cause interference to radio communications, is more important that it is installed and used in accordance with the instruction that are explained in this manual.

It is in conformity with the limits for a Class A computing device pursuant to Subpart B of Part 15 of the FCC Rules, that fixed and guarantee the reasonable protection against such interference when it is used in a commercial environment.

When this equipment is installed in a residential area it could cause interference, in which case the user must provide itself to avoid the interference.

The test results show compliance with the Class A limits for radiated emissions.

The present design is property of Eurotek s.r.l. and is protected by Copyright.  
Its reproduction, distribution and disclosure to third-parties without written authorisation is forbidden  
Every reproduction, re-distribution or disclosure without prior written authorisation  
is expressly forbidden by the law and can lead to serious civil and penal sanctions.



## Warning!

**The socket utilized for the unit supply must have the appropriate ground conductor.**

**The connection of the unit , to a socket without the ground conductor, will make the whole equipment dangerous for people safety.**

**About the repairing of the units please refer to specialized personnel only .**

**Inside the devices there are voltages which could be dangerous to people.**  
**Before opening the cover switch off the unit, disconnect the connection and the supply cables.**

**In case of electrical shock please follow the instructions of first aid listed on page 4**

**Substitute the fuses interrupted with others of the same type and voltage.**



**The waste disposal of the devices must be executed in the respect of the enforced laws in the country uses.**

**Eurotek not assumed responsibility for waste disposal in contrast with enforced laws.**

### **LIFE SUPPORT APPLICATIONS.**

*Eurotek's products are not designed for use as critical components in life support devices or system without the express written approval of the Eurotek S.r.l. As used herein.*

- *Life support devices or system are devices or system which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.*
- *A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.*

*The information given in this documentation could have variations without forewarning.*

*The firm Eurotek S.r.l. does not give any guaranty about this documentation.*

*The firm Eurotek S.r.l. does not consider itself responsible for possible mistakes which could be found in this documentation.*

## ***First aid: artificial breathing(mouth to mouth)***

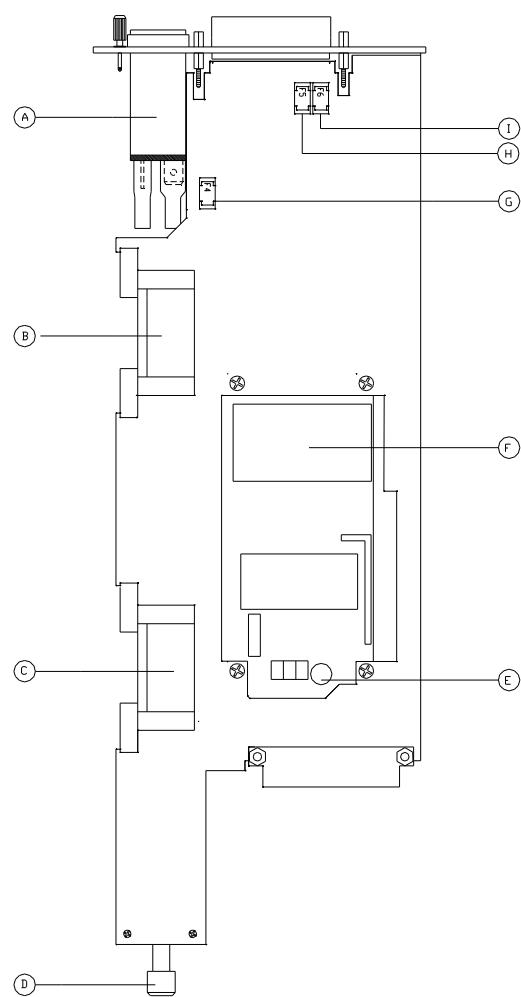
1	<p>In case of electric shock you have to ensure the first aids to the patient, but to do this you have to consider two very important things:</p> <ul style="list-style-type: none"><li>- <b>interrupt immediately the electric circuit;</b></li><li>- <b>if the circuit has not been interrupted, do not touch the patient with bare hands;</b></li></ul> <p>After doing this, without delay contact the nearest mobile unit of first aid and practice to the patient, in case of loss of consciousness, the breathing mouth to mouth as described below.</p>	
2	<p>Put the patient lying on his back with the arms parallel to the body, ensure that he does not have the breathing tracts obstructed (chewing-gum, dental prosthesis, etc.), otherwise set him free from foreign bodies.</p> <p>Kneel near the patient's head and putting a hand under his neck, incline as possible his/her head backwards.</p>	
3	<p>Going on with keeping the patient's head inclined with one hand, use the other one to occlude the nostrils, if you are going to practise the breathing through the oral cavity, or occlude the mouth if you want to do it through the nasal cavity.</p> <p>While doing this begin the auto-oxygenation with deep breathing</p> <p>Then practice the artificial breathing blowing in the chosen cavity beginning with ten expirations each minute to go on them with twelve and fifteen.</p>	
4	<p>During the execution of breathing procedure you have to control observing that the patient's chest dilates, otherwise change cavity where to blow the air because the previous one could be obstructed.</p>	
5	<p>Do not ever stop the artificial breathing until the patient has recovered or the first aid unit has come</p>	

# INDEX

<b>1. EK-PWS/6 BOARD.....</b>	<b>6</b>
1.1    TOP VIEW .....	6
1.2    TOP VIEW DESCRIPTION .....	7
1.3    BOTTOM VIEW .....	8
1.4    BOTTOM VIEW DESCRIPTION.....	9
<b>2. BOARD PANEL .....</b>	<b>10</b>
2.1    PANEL REPRESENTATION .....	10
2.2    PANEL DESCRIPTION .....	10
2.3    PANEL CONNECTORS DESCRIPTION .....	11
2.3.1 <i>RS-232 interface connector</i> .....	11
2.3.2 <i>Auxiliary connector</i> .....	11
<b>3. TECHNICAL SPECIFICATION.....</b>	<b>12</b>
<b>EK – PWS/11 .....</b>	<b>12</b>
<b>EK – PWS/12 .....</b>	<b>12</b>
<b>EK – PWS/13 .....</b>	<b>12</b>

## 1. EK-PWS/6 BOARD

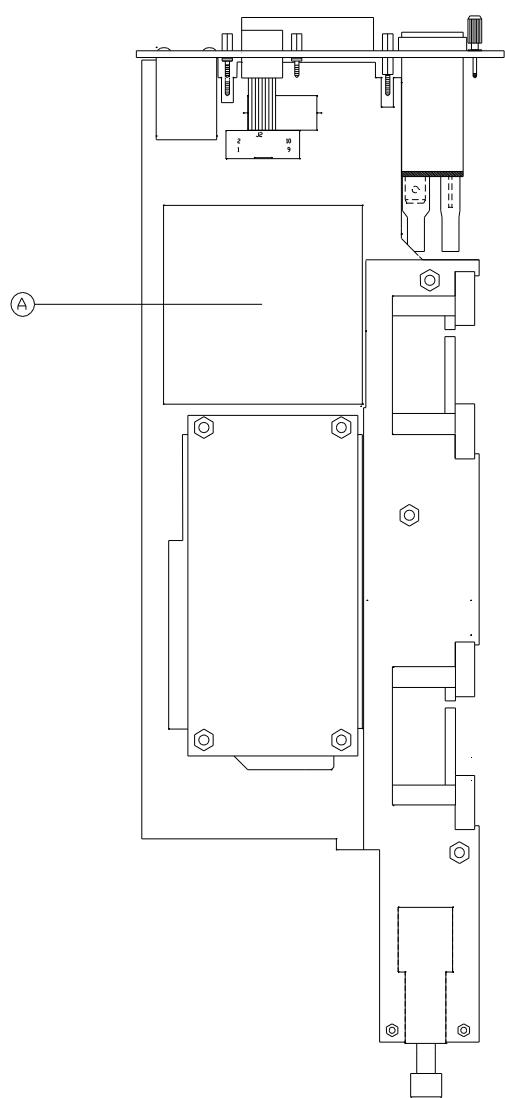
### 1.1 Top view



## 1.2 Top view description

- A) Line filter
- B) Cooling fan
- C) Cooling fan
- D) General switch
- E) Fuse Vac (2A)
- F) AC power supply
- G) Fuse +12V (5A)
- H) Fuse -DC (5A)
- I) Fuse +DC (5A)

### 1.3 Bottom view



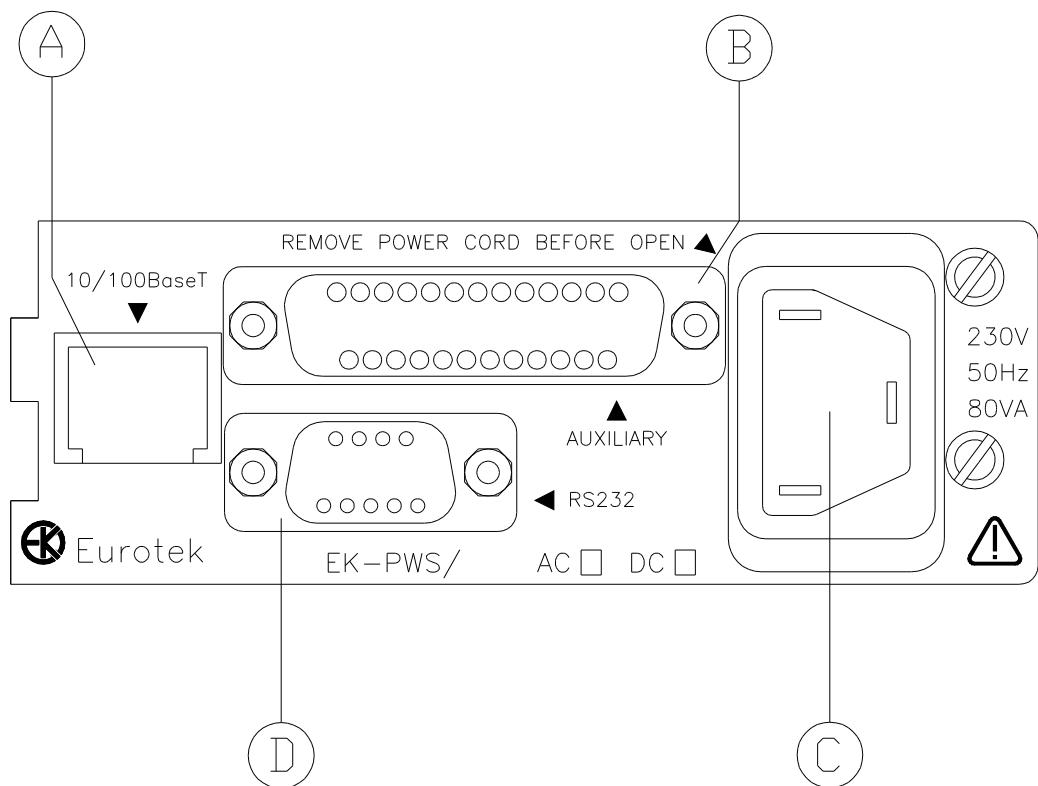
## 1.4 Bottom view description

### A) DC power supply

- EK – PWS/11 18 ÷ 36 Vdc
- EK – PWS/12 36 ÷ 72 Vdc
- EK – PWS/13 NOT INCLUDED

## 2. BOARD PANEL

### 2.1 Panel representation

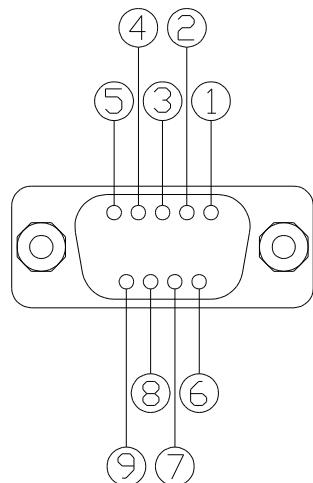


### 2.2 Panel description

- A) Ethernet connector
- B) Auxiliary connector
- C) Power supply connector
- D) RS-232 interface connector

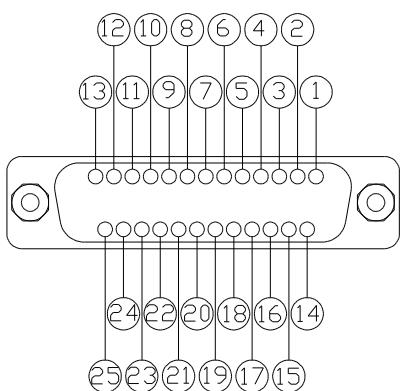
## 2.3 Panel connectors description

### 2.3.1 RS-232 interface connector



PIN	FUNCTION
1	GROUND
2	TXD
3	RXD
4	
5	GROUND
6	
7	CTS
8	RTS
9	

### 2.3.2 Auxiliary connector



PIN	FUNCTION
1	+12V OUTPUT
2	+12V OUTPUT
3	UART 2 RX
4	ANALOG TO DIGITAL 0
5	DIGITAL TO ANALOG 0
6	COMMON RELAY
7	ALARM RELAY
8	RELAY 4
9	RELAY 0
10	+DC INPUT
11	+DC INPUT
12	-DC INPUT
13	-DC INPUT
14	+12V OUTPUT
15	UART 2 TX
16	GROUND
17	ANALOG TO DIGITAL 1
18	DIGITAL TO ANALOG 1
19	GROUND
20	RELAY 2
21	RELAY 3
22	RELAY 1
23	+DC INPUT
24	N.C.
25	-DC INPUT

### 3. TECHNICAL SPECIFICATION

#### EK – PWS/11

Input range voltage(Vac)	230 Vac, 110Vac
Input range voltage(Vdc)	18 ÷ 36 Vdc
Input Frequency	47 ÷ 63 Hz
Output Current	10000 mA
Output Voltage	12V dc
Power	120W
Working temperature range	0°C ÷ +50°C
Stored temperature range	-40°C ÷ +85°C

#### EK – PWS/12

Input range voltage(Vac)	230 Vac, 110Vac
Input range voltage(Vdc)	36 ÷ 72 Vdc
Input Frequency	47 ÷ 63 Hz
Output Current	10000 mA
Output Voltage	12V dc
Power	120W
Working temperature range	0°C ÷ +50°C
Stored temperature range	-40°C ÷ +85°C

#### EK – PWS/13

Input range voltage(Vac)	230 Vac, 110Vac
Input Frequency	47 ÷ 63 Hz
Output Current	10000 mA
Output Voltage	12V dc
Power	120W
Working temperature range	0°C ÷ +50°C
Stored temperature range	-40°C ÷ +85°C

**Eurotek S.r.l.**

c/o Parco Scientifico Tecnologico e delle  
Telecomunicazioni in Valle Scrivia  
Strada Comunale Savonesa, 9  
15050 RIVALTA SCRIVIA (AL)  
tel. +39 (0)131 860205 r.a. fax +39 (0)131 860993  
<http://www.euroteknel.com>  
e-mail: info@euroteknel.com