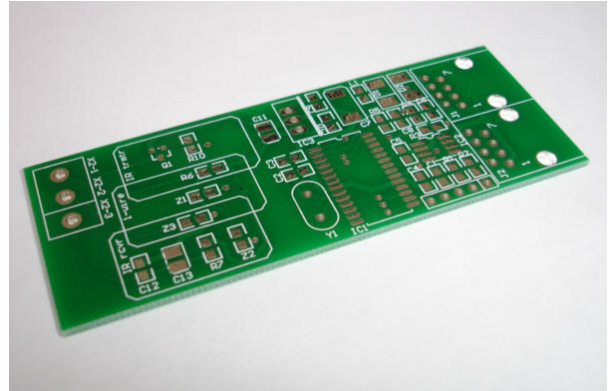


# Printed Circuit Board and Enclosure

for infrared receiver application UNIV 1.0.3.0 (CPU)

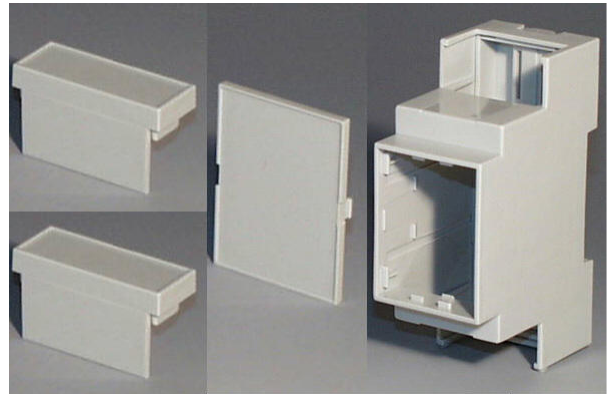
## Printed Circuit Board:

- Printed circuit board for applications with use of processor UNIV 1.0 (CPU)
  - infrared receiver UNIV 1.0.3.0
  - temperature sensor UNIV 1.0.4.0
  - infrared transmitter UNIV 1.0.5.0
- PCB dimensions: 86mm x 33mm



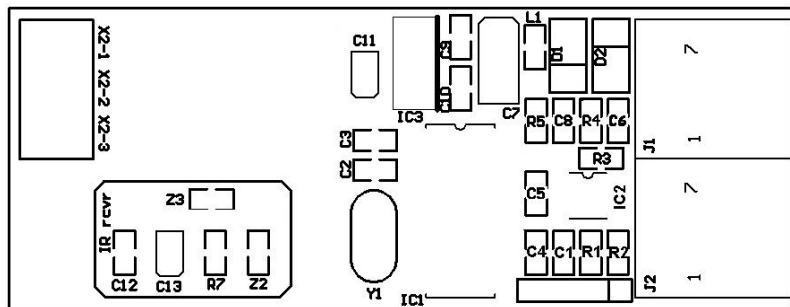
## Enclosure:

- 2 module wide 35mm DIN rail enclosure
- Enclosure dimensions: 90mm x 58mm x 36mm

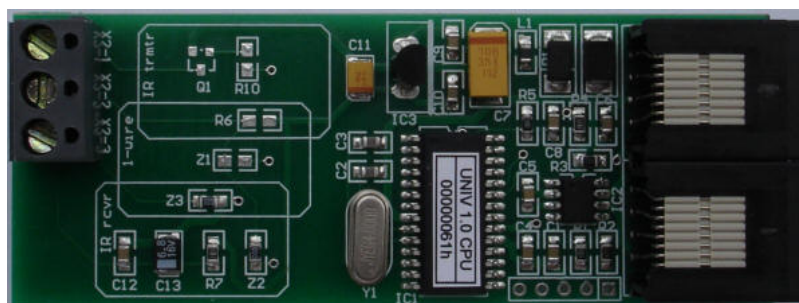


## 1. Printed Circuit Board

### 1.1. Assembly schematic

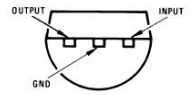


### 1.2. Assembled PCB



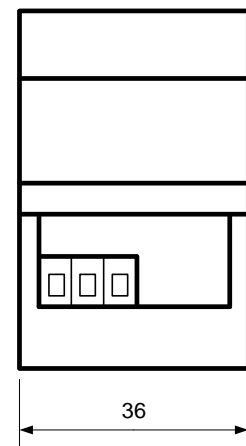
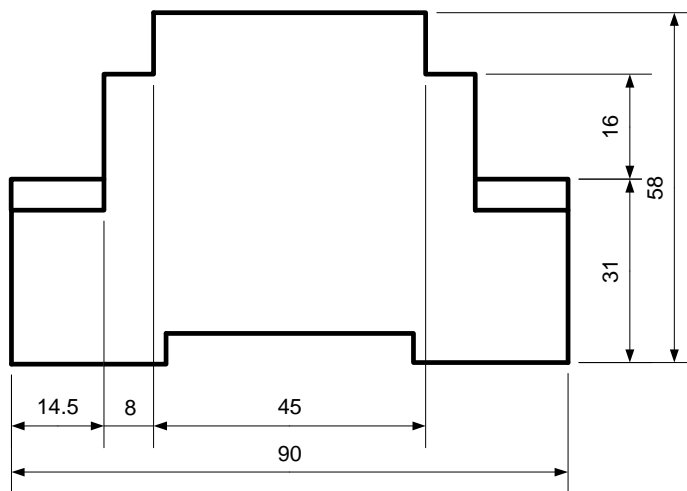
**1.3. Components**

Designator	Type	Footprint	Description
C1, C4, C5, C6, C8, C9, C10, C12	0.1uF	0805	Capacitor
C2, C3	22pF	0805	Capacitor
C7	10uF/35V	SME	Electrolytic Capacitor
C11	10uF/16V	SMB	Electrolytic Capacitor
C13	4u7/6V	SMB	Electrolytic Capacitor
R1	10k	0805	Resistor
R2	470 Ohm	0805	Resistor
R3	4k7	0805	Resistor
R4	51k 1%	0805	Resistor
R5	10k 1%	0805	Resistor
R7	100 Ohm	0805	Resistor
Z2, Z3	0 Ohm	0805	Resistor
L1	BLM21A102SPT	0805	Choke
Y1	4MHz	HC49-S	Quartz crystal
D1	FS1J	DO-214	Diode
D2	P6SMB33CA	DO-214	Transil diode
IC1	UNIV 1.0 (CPU)	SOIC-28	Processor of HAPCAN universal module
IC2	MCP2551-SN	SOIC-8	CAN Transceiver
IC3	LM7805L	TO-92	Voltage regulator
J1	RJ45	L18xW15xH11	Connector
J2	RJ45	L18xW15xH11	Connector
X2	ARK2	H=12,5mm raster=5mm	Terminal block



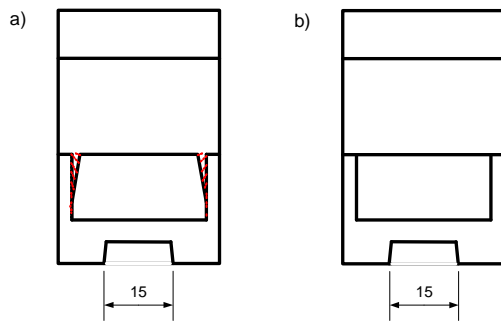
**2. Enclosure**

**2.1. Dimensions**



**2.2. Mechanical processing**

**2.2.1. Main part**

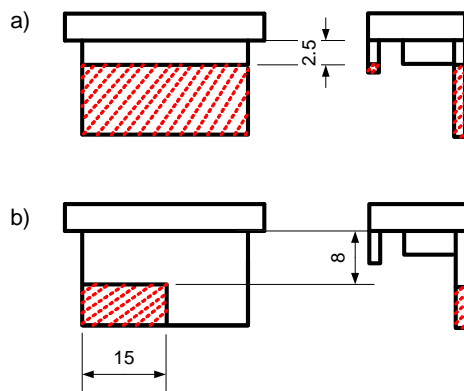


A view from the side, where shown detail is 15mm wide.

Drawing a) shows striped part which must be cut out.

Drawing b) is a view when striped parts have been cut out.

**2.2.2. Terminal guards**



Striped parts must be removed.

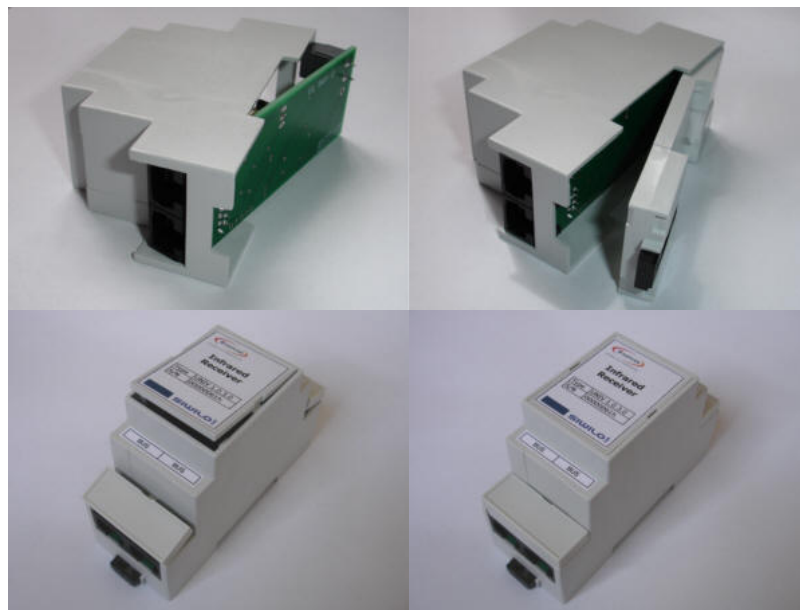
Drawing a) shows RJ45 connector guard.

Drawing b) shows terminal block guard.

**2.2.3. Front panel**

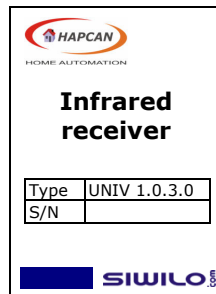
Does not need processing.

**2.3. Assembling**



**2.4. Labels**

X2-3 X2-2 X2-1



BUS	BUS
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**3. Document version**

File	Description	Date
univ_v1-0-3-0-pcba.pdf	Original version	June 2008