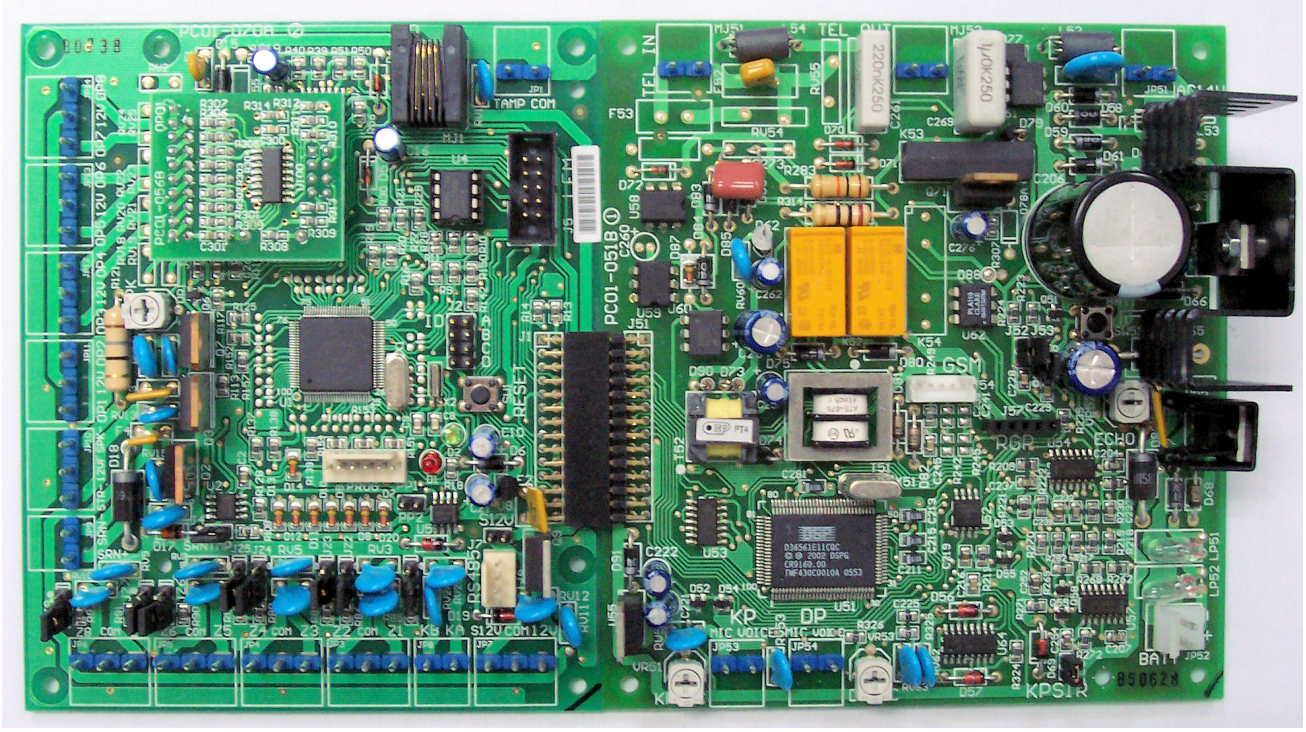
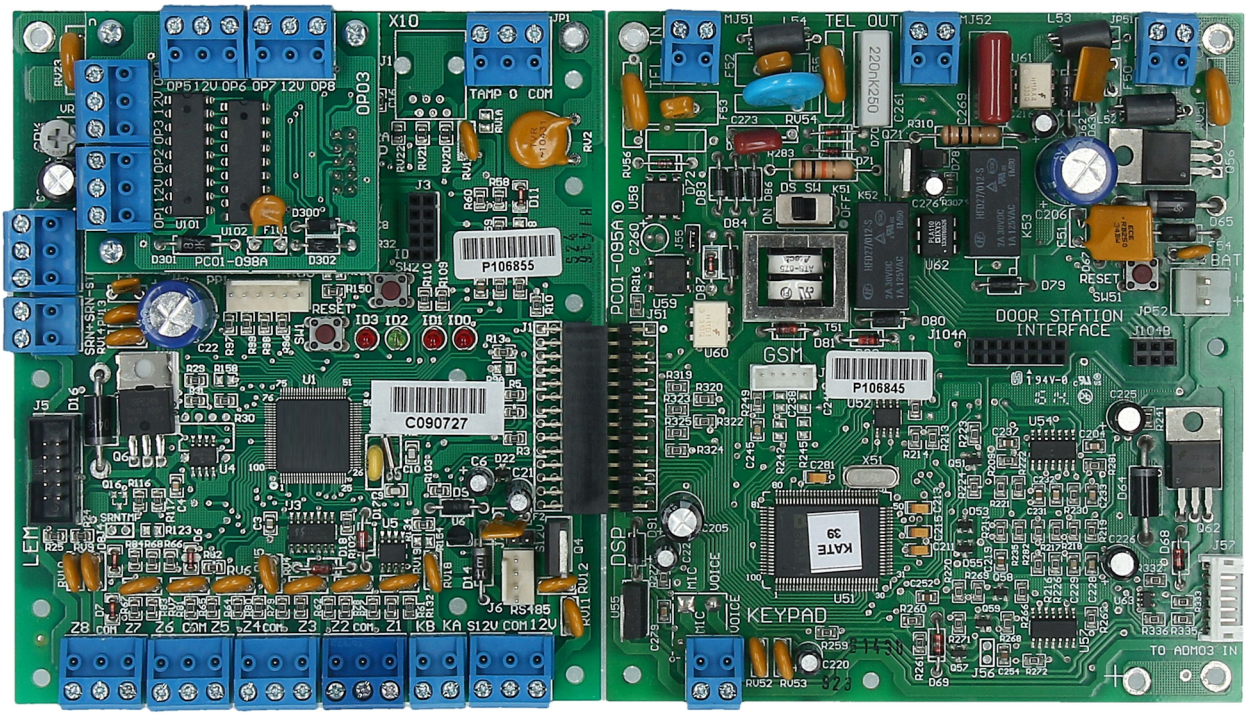
CM9001 vs CM9000

Differences between CM9001 and CM9000



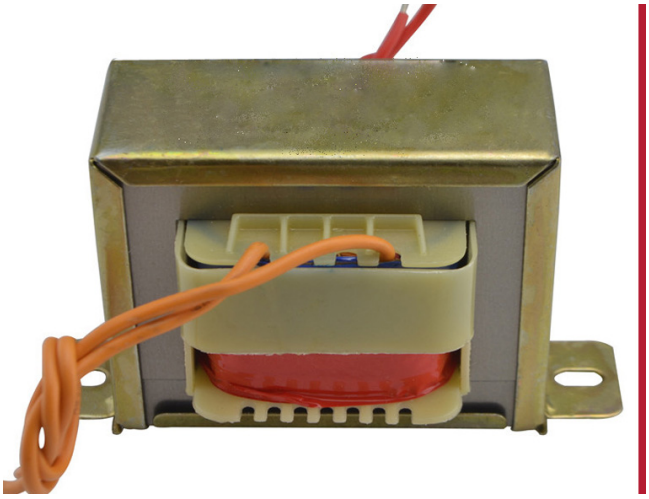
CM9000



CM9001

Power Supply

The most important difference for CM9001 is the use of a universal (90-260VAC to 15VDC 1.7A) switched power supply TT01-0021 with DC Output instead of the old Transformer (with AC Output). The new power supply can be used for all countries (with all the regulatory and safety approvals) and is much lighter, and is more efficient ie it takes much less current from the 230V supply compared to a transformer. The correct transformer /power supply MUST be used with the matching DSP Board ie Transformer with CM9000 DSP, power supply TT01-0021 with CM9001 DSP. Other than that the CM9001 and CM9000 CPU and DSP boards can be interchanged.



Transformer for CM9000 3 Kg



TT01-0022 Switched Power Supply for CM9001 0.2 Kg

CPU and DSP Boards

The CM9000 and CM9001 PCBs consist of 2 smaller PCBs connected by a connector in the middle. The CPU Board or left half include the microprocessor, the EEPROM and RS485 driver . The DSP board or right half includes the DSP, voice flash memory, and telephone interface. The reason for spliiting up the CM9000/CM9001 into 2 parts is to allow easier inventory control

The CPU and DSP boards can be interchanged between CM9000 and CM9001, ie CPU from CM9000 and be connected to DSP from CM9001 and vice versa. However the restriction is that the DSP board must be connected to the appropriate power supply, ie CM9000 DSP with the old AC Transformer, and CM9001 DSP with the new Switched DC power supply.
The combination of CM9001 CPU with CM9000 DSP has a part designation, CM9000B which

needs the AC transformer.

Differences

Feature	CM9000	CM9000B	CM9001
Power Supply	AC Transformer	AC Transformer	15V DC Power Supply
CPU	CM9000 CPU	CM9001 CPU	CM9001 CPU
DSP	CM9000 DSP	CM9000 DSP	CM9001 DSP
X10	Yes	No	No
Plug-in ETH03 function as UCM	No	Yes	Yes
EOL Shunts	Yes use shunts	No, use Soft EOL	No, use Soft EOL
Plug in LEM02B	No	Yes	Yes
Output Submodule	OP01 without terminal blocks ie Terminal block on CPU PCB	OP03 with terminal Blocks, ie no terminal block on CPU PCB	OP03
U4 EEPROM	IC Socket, removable	IC soldered in.	IC soldered in
Tamper Terminal	2 pin	3 pin, center no conect	3 pin, center no conect
Local Phone access	Yes	Yes	No (requires DSI)
Power Supply heatsink	Yes	Yes	No

Yellow is for Feature located in CPU Board
Green is for Feature located in DSP Board

Firmware Compatibility

Comfort Firmware is the same for CM9000 and CM9001. Firmware can be upgraded to the latest.

Compatibility of other Modules

LEM01-M2, LEM02-M2, LEM03-M2 can be used with CM9001 and CM9000.
LEM02B is direct plug in on CM9001 so it cannot be mounted on CM9000.LEM01-M2 should not be connected at the same time as LEM02B is plugged in.
All other RS485 Modules, eg Keypads, UCMs, TSM, IRIO are compatible with CM9000 and CM9001

Replacements/Upgrade

CM9000 and CM9001 PCB mounting holes are the same so one can be replaced with the other in the metal box mounting. However the CM9001 uses a different power supply so replacement of CM9000 with CM9001 will need a new transformer as well. This should not be much of a problem since the new Power supply is light and small and can be mounted without difficulty even though ther may not be mounting holes in the old EN enclosure for the power supply.
If any CM9000 PCB is to be replaced, we have some stock of the CM9000 DSP which can be used

with the existing AC transformer

History
Feb 2019