

# **G-3000**

**Modular System Panel PCs**

**User's Manual**

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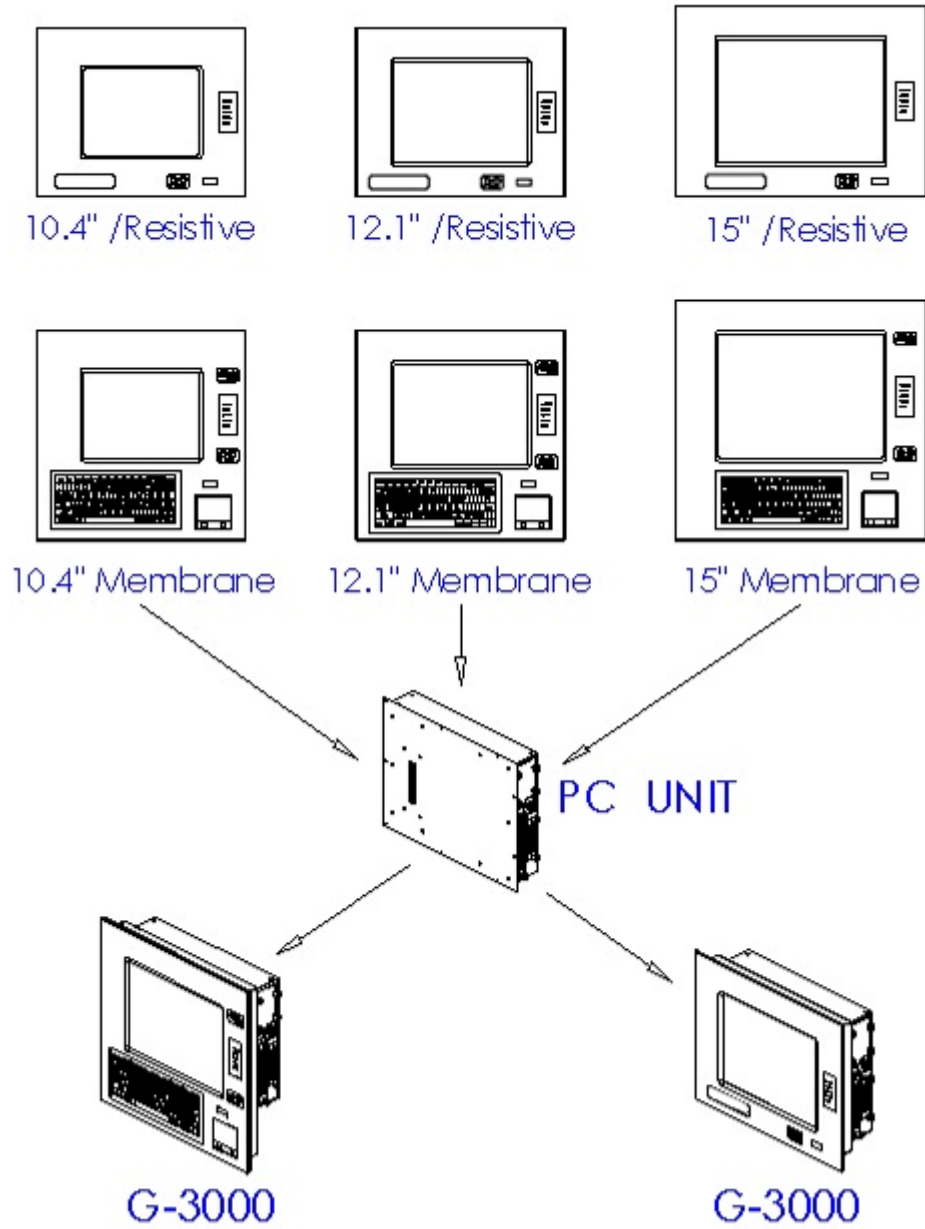
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# Chapter 1 : General Information

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## 1.1 Overview

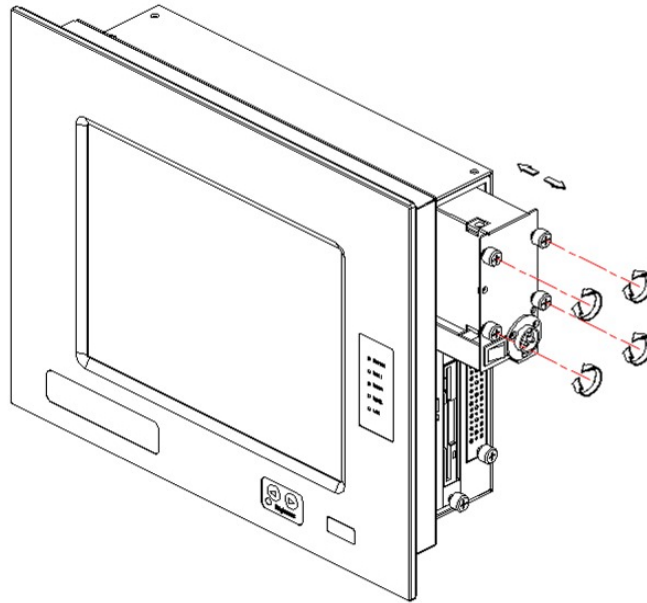


## 1.2 Specifications

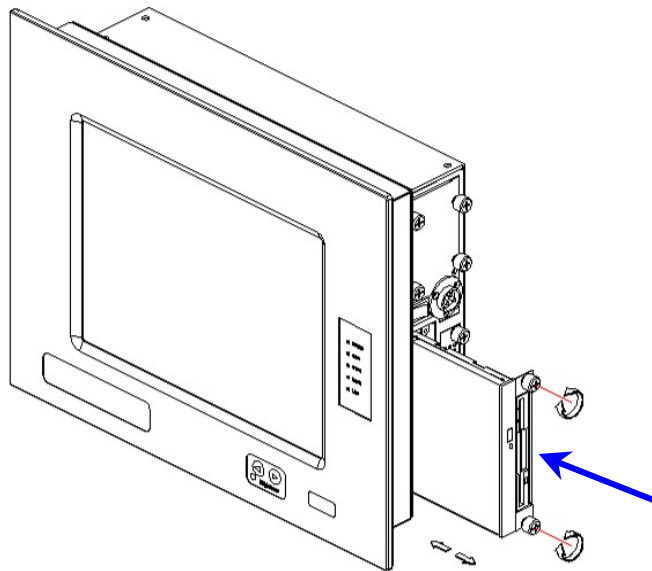
<b>G-3000 General Specifications</b>		
<b>Processor</b>	Socket 370 Celeron compatible	
<b>System Memory</b>	32~128MB DIMM	
<b>Video Controller</b>	PCI based SVGA Controller C&T 69000	
<b>Display Memory</b>	2MB on board	
<b>LCD</b>	High brightness TFT LCD 10.4, 12.1, 15	
<b>Input device (optional)</b>	Resistive touch screen	
	Membrane keyboard & touch pad	
<b>COM ports</b>	3 x RS-232 and 1 x RS-232/422/485 configurable	
<b>Parallel port</b>	one multi-mode SPP /ECP/EPP parallel port	
<b>LAN</b>	10/100BaseT auto-sensing Fast Ethernet port	
<b>USB</b>	2 x USB ports	
<b>P/S2 , Keyboard ports</b>	1 x P/S2 and 1 x Keyboard ports	
<b>Audio</b>	Creative ES1373, Line out, Line in, MIC	
<b>HDD</b>	2.5 industrial grade HDD	
<b>CD-ROM</b>	Slim line CD-ROM	
<b>FDD</b>	3.5 slim FDD	
<b>Solid State Disk</b>	M-system DiskOnChip 2MB~72MB	
<b>Power unit</b>	(A) AC 90~240 Vin 5V@18A, 12V@2.5A, -12V@1A (B) DC 18~36 Vin 5V@12A, 12V@2.5A (optional)	
<b>Expansion Slots</b>	1x PCI	
<b>Operating Temperature</b>	PC module	-20 ~ 60 °C
	LCD panel	0 ~ 50 °C
<b>Relative humidity</b>	5~95% non-condensing	
<b>Industrial front panel</b>	IP65 , NEMA 4/12, aluminium	

## 1.3 Features

### 1.3.1 Swappable Power Unit

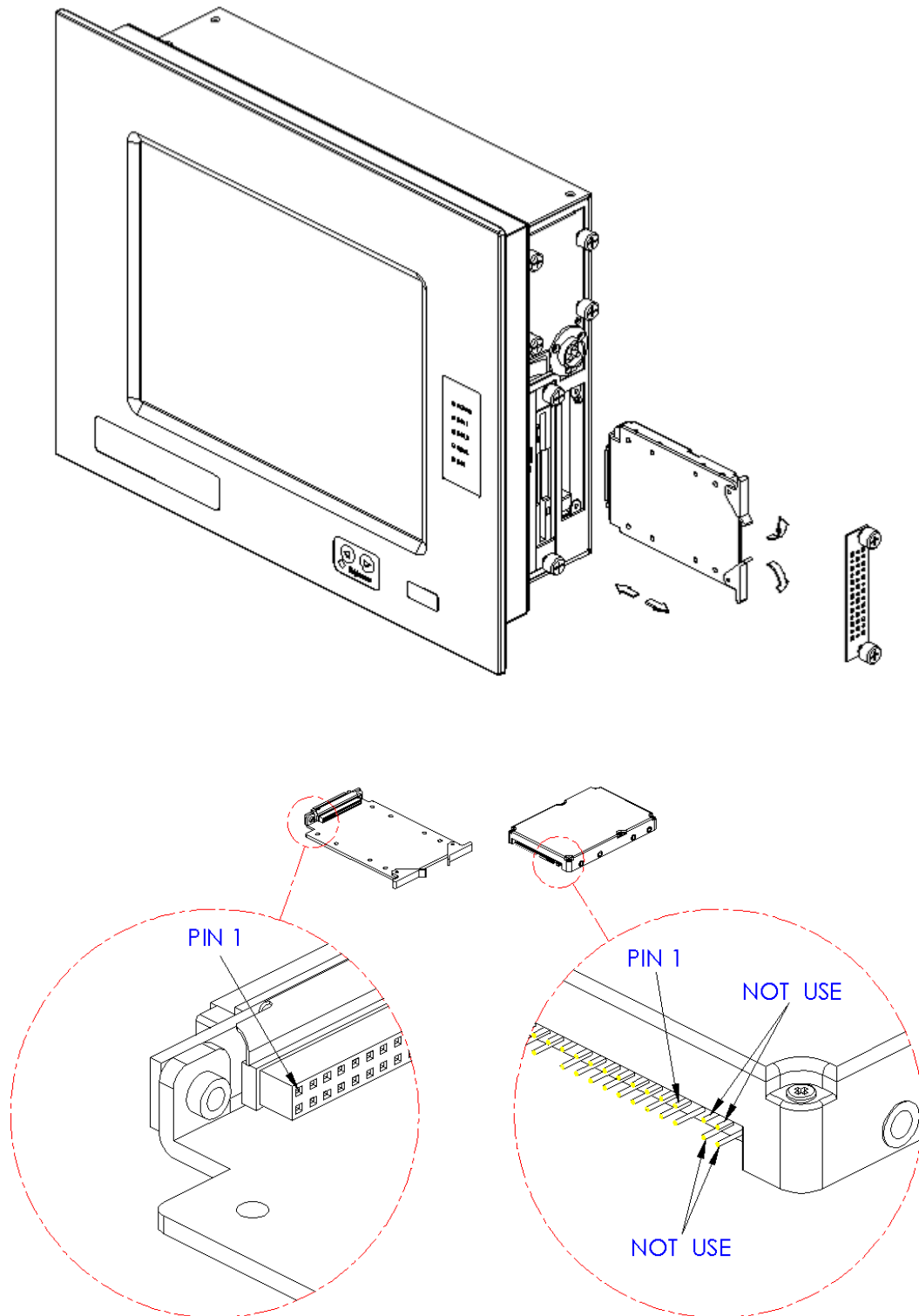


### 1.3.2 Swappable CD-ROM/FDD Module

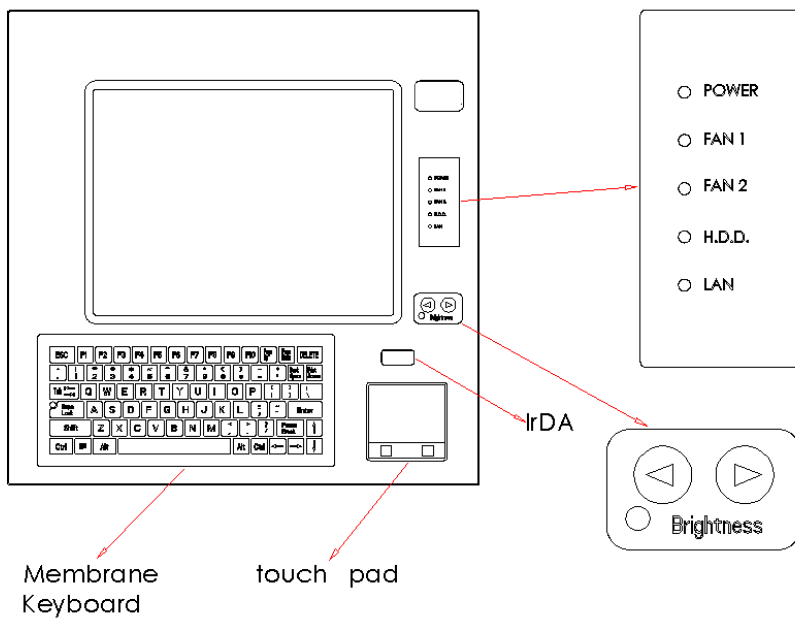
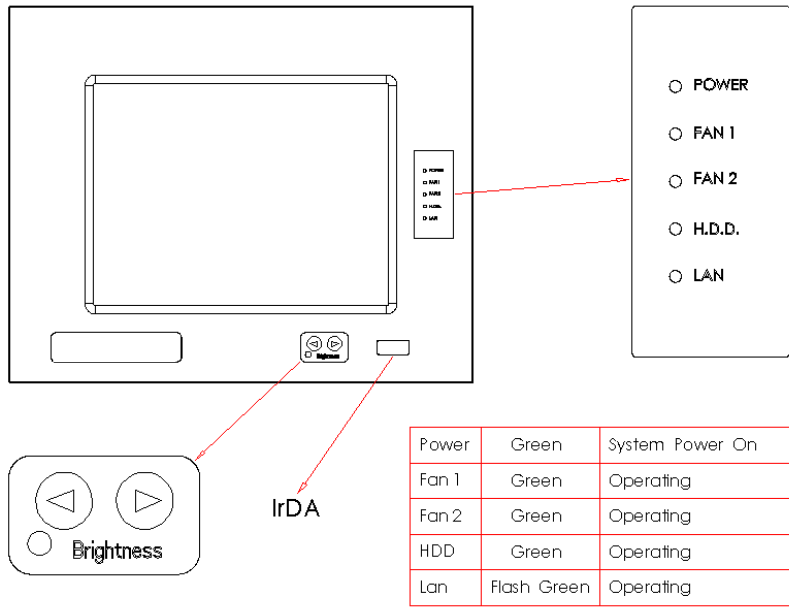


Please push the **CENTER** of CD-ROM/FDD module, in order to prevent poor connection.

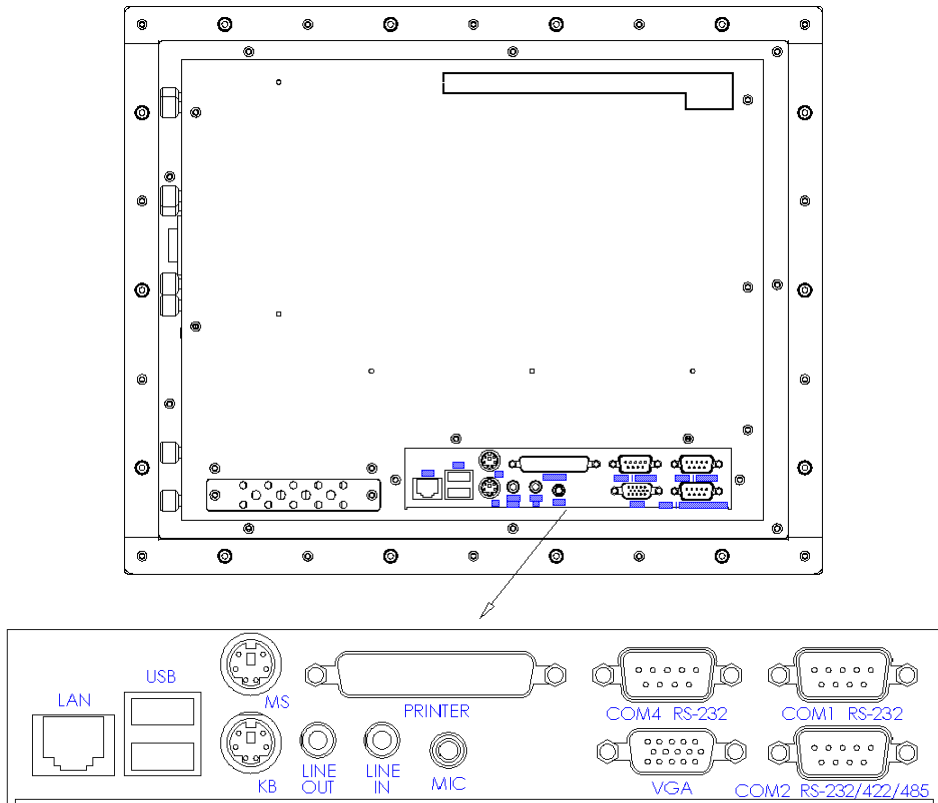
### 1.3.3 Swappable HDD Module / To install a hard disk



- 1.3.4 System status LEDs**
- 1.3.5 Brightness control**
- 1.3.6 IrDA**
- 1.3.7 Membrane keyboard**
- 1.3.8 Touch pad**



### 1.3.9 I/O port



PS/2 mouse and keyboard ports won't work while attaching the PC unit to Display unit with Membrane.

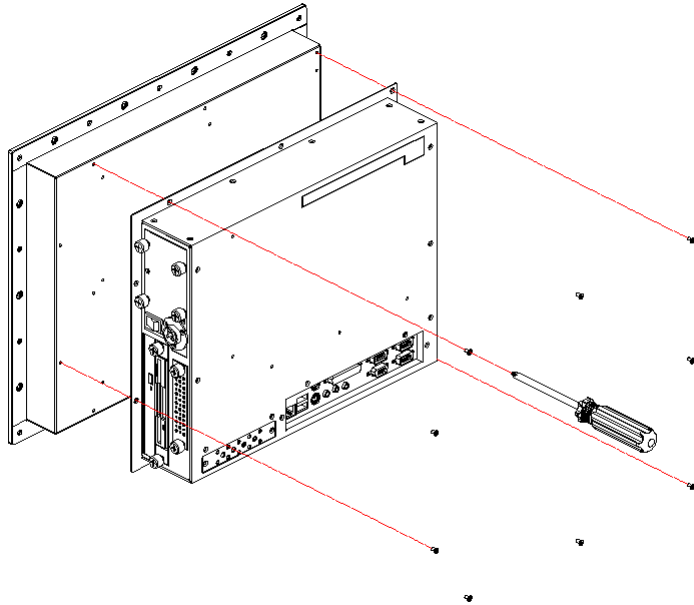


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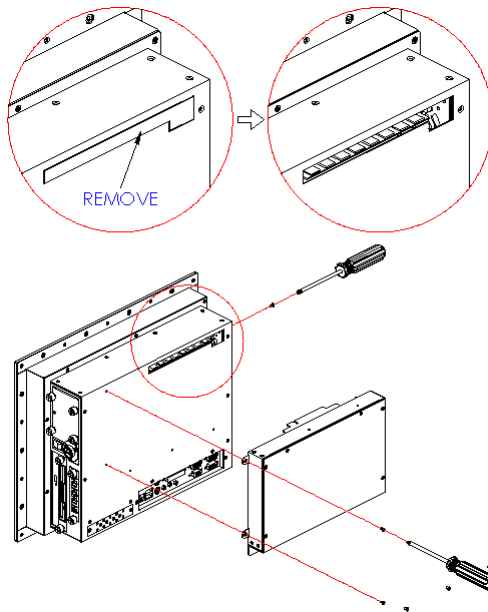
## Chapter 2 : Installation

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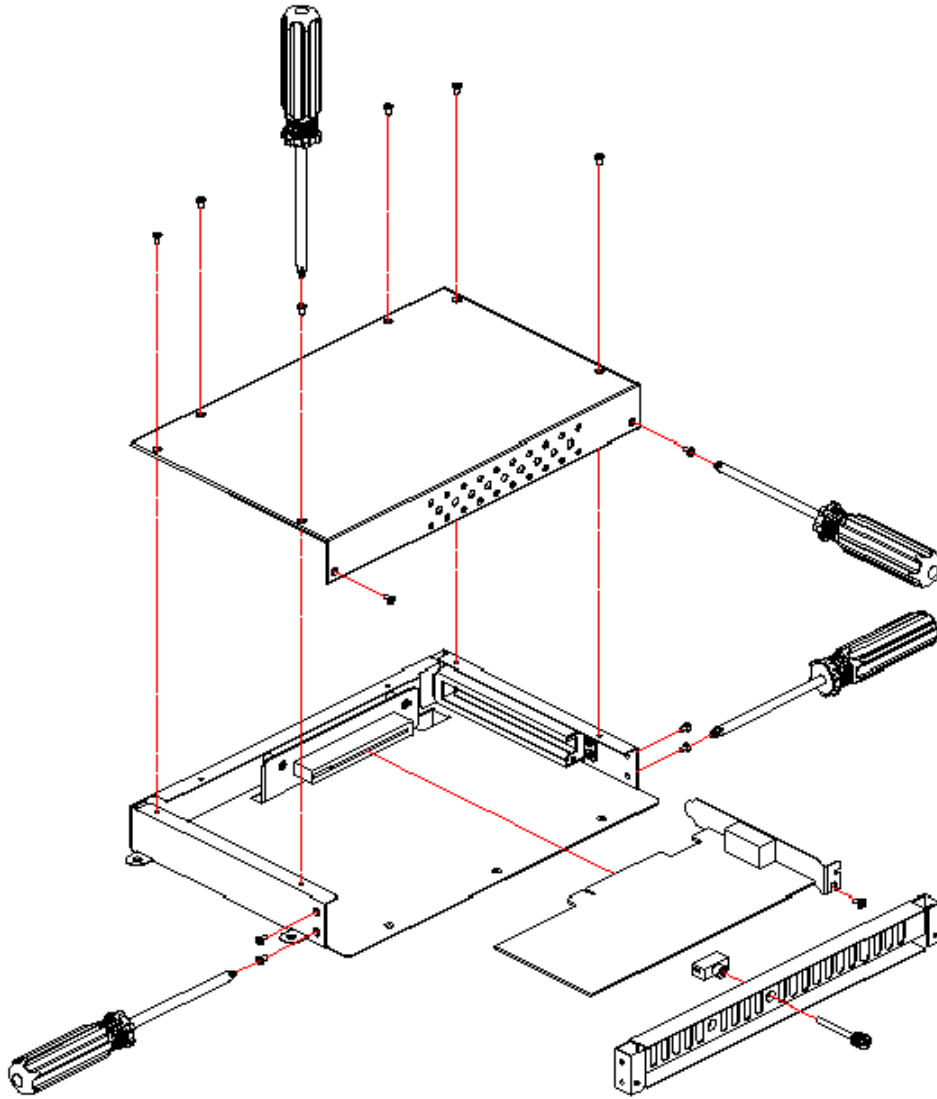
### 2.1 To attach the PC unit to Display unit



### 2.2 To attach the Expansion unit to PC unit



### 2.3 To install an add-on card in the expansion module



## 2.4 CPU configuration

CPU core frequency = CPU frequency ratio (2~5.5)\*External bus clock (66 or 100Mhz)

CPU FREQUENCY RATIO	SW1(4)	SW1(5)	SW1(6)
2X	ON	OFF	OFF
2.5X	ON	OFF	ON
3X	ON	ON	OFF
3.5X	ON	ON	ON
4X	OFF	OFF	OFF
4.5X	OFF	OFF	ON
5X	OFF	ON	OFF
* 5.5X	OFF	ON	ON

\* Default

### Note :

**Most frequency ratio of Celeron CPUs are pre-locked within the CPUs. These CPUs run at fixed speed (frequency) regardless of the configurations listed above.**

**If the CPU you are using requires higher ratio than 5.5X, it is most likely pre-locked.**

## 2.5 DRAM installing

### System Memory

The left edge of the G-3000 MAIN BOARD contains a socket for 168-pin dual inline memory module (DIMM). The socket uses 3.3 V unbuffered synchronous DRAM (SDRAM). DIMM is available in capacities of 32, 64, or 128 MB. The socket can be filled in the DIMM of any size, giving your G-3000 MAIN BOARD between 32 and 128 MB of memory.

### Supplementary information about DIMM

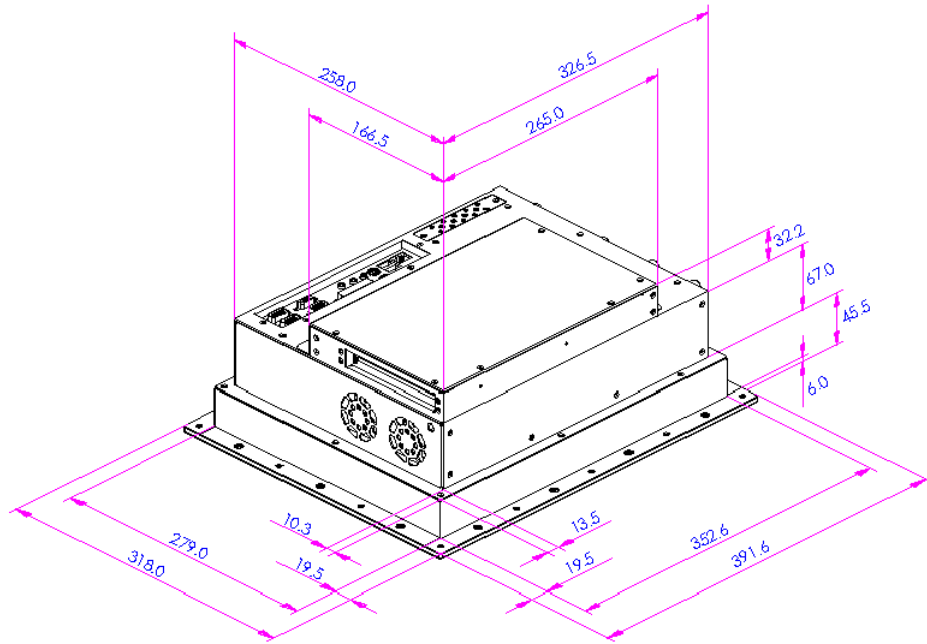
Your G-3000 MAIN BOARD can accept both regular and PC-100 SDRAM DIMM Module(with or without parity). However, if the Pentium II 350MHz or up CPU is used, The G-3000 MAIN BOARD can only accept PC-100 SDRAM DIMM Module. Single-sided modules are typically 16 or 64 MB; double-sided modules are usually 32 or 128 MB.

### Memory Installation Procedures

To install DIMM, first make sure the two handles of the DIMM socket are in the **open**” position. i.e. The handles remain outward. Slowly slide the DIMM module along the plastic guides on both ends of the socket. Then press the DIMM module right down into the socket, until you hear a click. This is when the two handles have automatically locked the memory module into the correct position of the DIMM socket. To take away the memory module, just push both handles outward, and the memory module will be ejected by the mechanism in the socket.

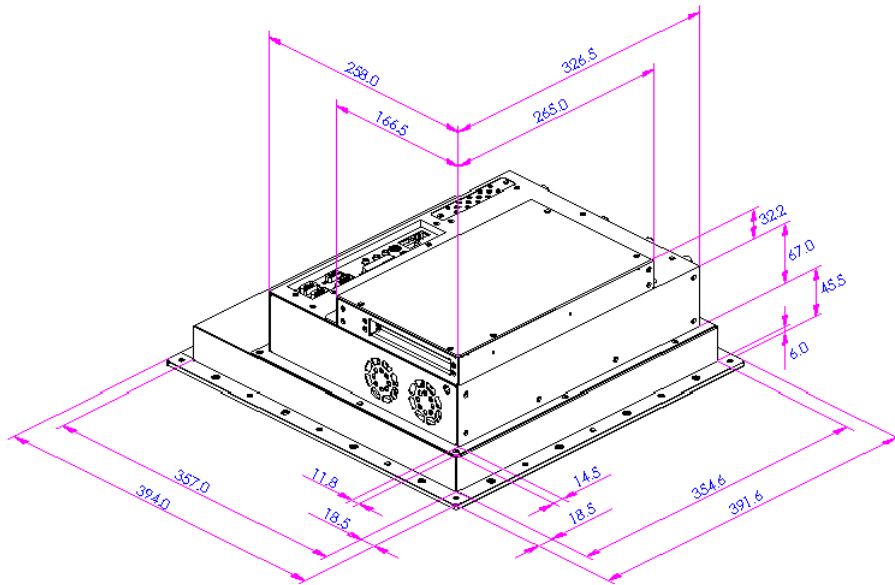
## 2.6 Dimensions

### 2.6.1 Dimensions of 10.4, 12.1 /Resistive



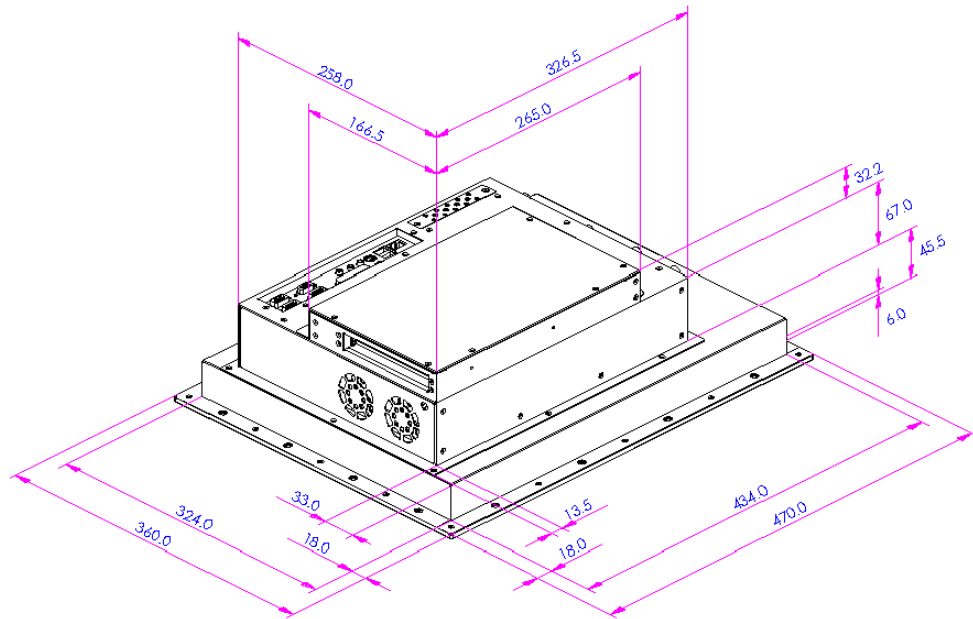
10.4, 12.1 inches / Resistive (unit: mm)

## 2.6.2 Dimensions of 10.4, 12.1 Membrane



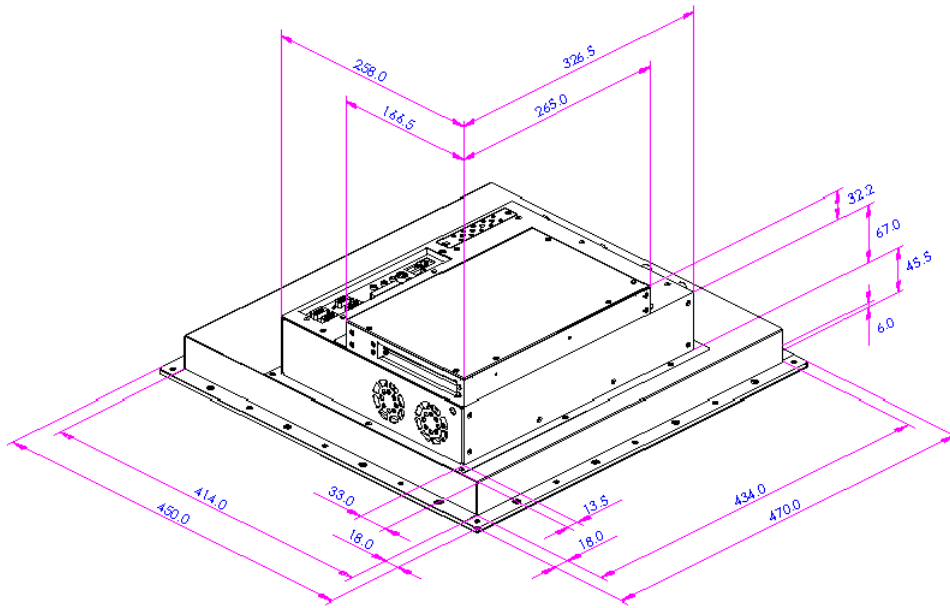
10.4, 12.1 inches Membrane (unit: mm)

### 2.6.3 Dimensions of 15-inch /Resistive



**15 inches / Resistive (unit: mm)**

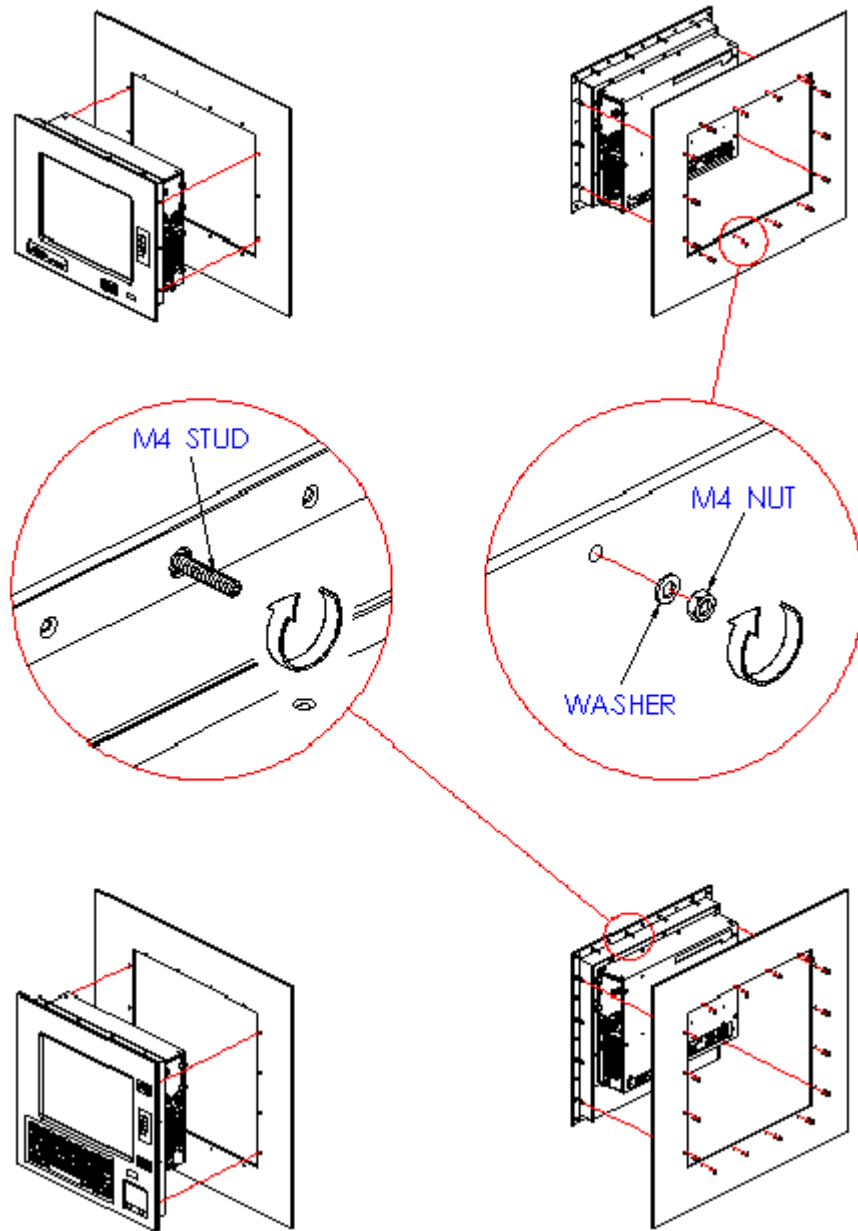
### 2.6.4 Dimensions of 15 Membrane



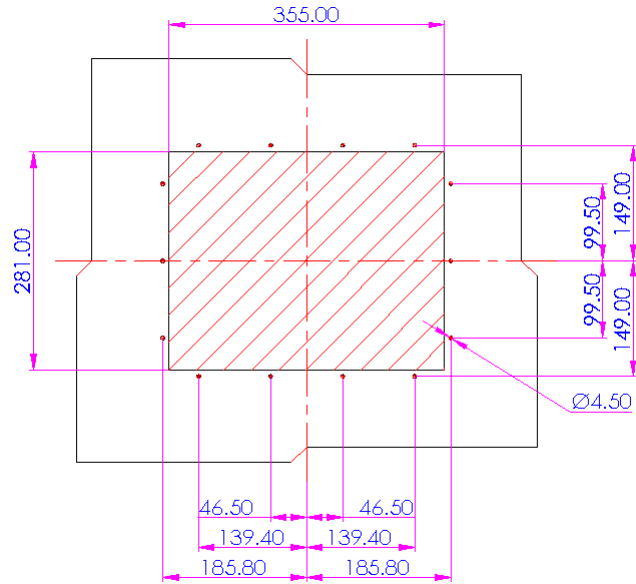
**15 inches Membrane (unit: mm)**



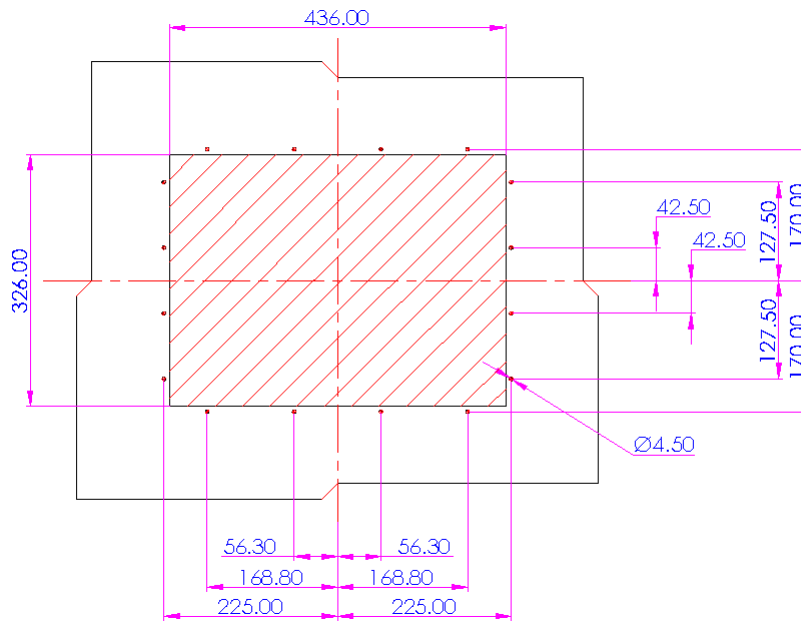
## 2.7 Mounting of G-3000



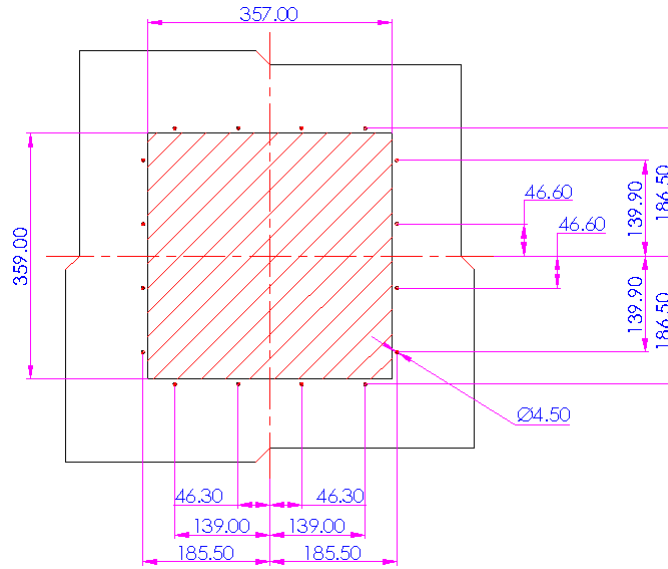
### 2.7.1 Cut-out for 10.4, 12.1/ Resistive of G-3000



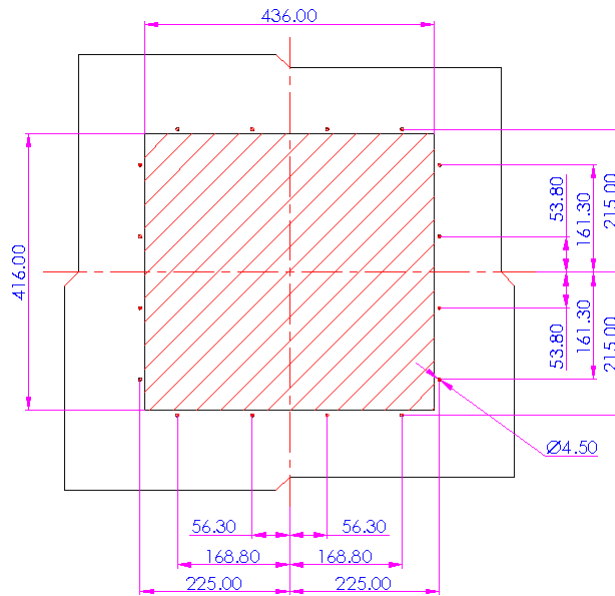
### 2.7.2 Cut-out for 15/Resistive of G-3000



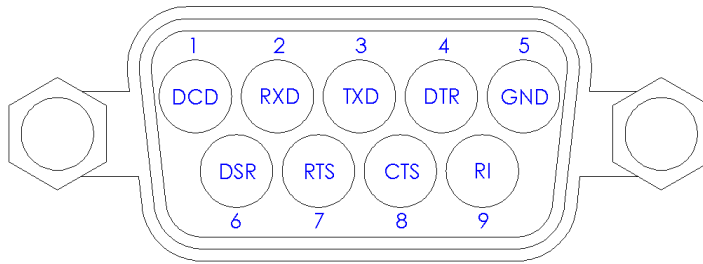
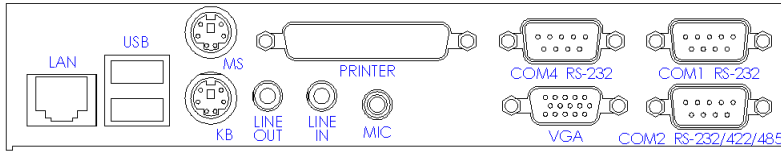
### 2.7.3 Cut-out for 10.4, 12.1 Membrane of G-3000



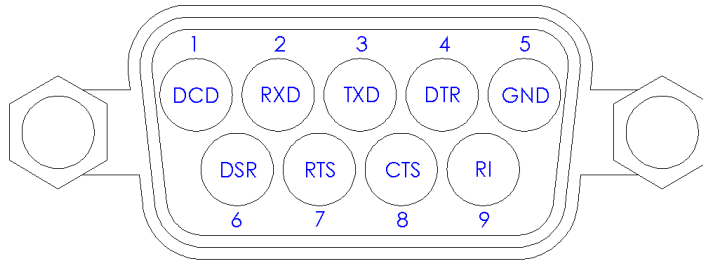
### 2.7.4 Cut-out for 15 Membrane of G-3000



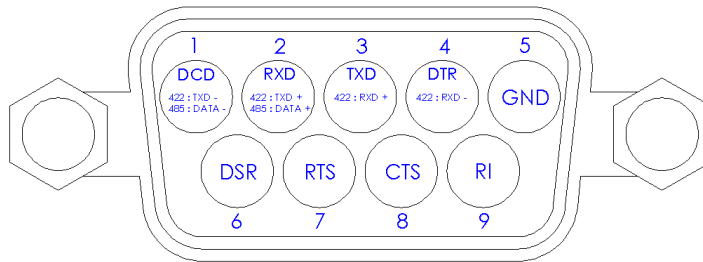
## 2.8 COM1, COM2, COM4



COM4 RS-232



COM1 RS-232

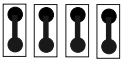
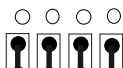
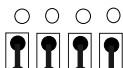





COM2 RS-232/422/485

## 2.9 COM2 RS-232/422/485 select (J10, J7)

### COM2 RS-232/422/485 select (J10, J7)

The COM2 serial port can be selected as RS-232, RS-422, or RS-485 by setting J10 & J7.

COM2 Select (J10, J7)			
	RS-232*	RS-422	RS-485
J10	1 4 7 10	1 4 7 10	1 4 7 10
			
	○ ○ ○ ○	○ ○ ○ ○	○ ○ ○ ○
	3 6 9 12	3 6 9 12	3 6 9 12
J7	1 3 5	1 3 5	1 3 5
			
	○ ○ ○	○ ○ ○	○ ○ ○
	2 4 6	2 4 6	2 4 6

\*default