



# **TermiCom PM 15” and 19” User Manual**

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*Warranty does not include:*

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## Warning



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# IMPORTANT

## Read me first

By carrying out the installation and the use of this equipment you accept the rules and limitations described in this document or any other document relating to this product.

By carrying out the installation and the use of this equipment you are presumed having read all the safety warnings (⚠).



### WARNING: Safety and reliability

SYMCOD Inc will not be responsible for the use of this equipment for other purpose then data collection. This equipment is designed and intended for an industrial and commercial use only. The TermiCom PM is not for a residential use.

## TermiCom PM (Panel Mount)

The TermiCom PM is a microcomputer specifically designed to be mounted on a control panel in dusty industrial environments. The casing of the PM is made of aluminum and its watertight stainless steel front allows it to be watered. Basic TermiCom PM is provided with a Atom 1,6 GHZ and a 15" tactile color screen (LCD TFT resistive). Several inputs and outputs make possible the addition of peripherals such as industrial keyboard, bar code scanner or any other peripherals. The flash disk included with the basic version can be completely protected. This feature is used to prevent any modification made by the user that could put in danger the application or the operating system. The basic operating system included in TermiCom PM is Windows XP Embedded; it is directly installed on the flash disk. For users who wish to have a complete version of Windows XP Pro, a version of TermiCom PM including this operating system is available. In that case, the operating system will be installed on a hard disk.

The Ultra-Resistant touch screen option is offered when the TermiCom will be used in environment in which there is particularly abrasive dust. Contrary to the standard touch screens that are covered with a polymer, this one is covered with a thin layer of tempered glass, which makes it much more resistant to the abrasives and even allows it to function with deep scratches. You can also use the wireless version of TermiCom PM by including the WiFi 802.11b option. In this case, an external antenna must be added if the control panel is made of metal to allow the signal to get out.

The TermiCom PM+ is also available when the use of a PCI card is required or when a faster processor is essential.

## Main characteristics

### TermiCom PM 15"

| # Product      | Comm.    |         | Color touch screen               | Windows operating system |                |               | RAM   |  | Storage     |  |                  | Inputs / Outputs    |           |             |               |              |           | Power requirement without peripheral (max.) |
|----------------|----------|---------|----------------------------------|--------------------------|----------------|---------------|-------|--|-------------|--|------------------|---------------------|-----------|-------------|---------------|--------------|-----------|---|
|                | Ethernet | 802.11B | 15" Ultra resistant <sup>1</sup> | XPe (XP Embedded)        | XP PRO English | XP PRO French | 2 gig |  | Flash 2 gig |  | Hard disk 80 GIG | Ethernet Port 1Gbit | USB Ports | Serial Port | Parallel Port | Audio output | SVGA port |   |
| 004-01220-2200 | X        | O       | X                                | X                        |                |               | X     |  | X           |  |                  | 2                   | 4         | 3           | 0             | 1            | 1         | 37W   |
| 004-01220-3200 | X        | O       | X                                | X                        |                |               | X     |  |             |  | X                | 2                   | 4         | 3           | 0             | 1            | 1         | 37W   |
| 004-01221-3200 | X        | O       | X                                |                          |                | X             | X     |  |             |  | X                | 2                   | 4         | 3           | 0             | 1            | 1         | 37W   |
| 004-01222-3200 | X        | O       | X                                |                          | X              |               | X     |  |             |  | X                | 2                   | 4         | 3           | 0             | 1            | 1         | 37W   |

O = Available Option

<sup>1</sup> Recommended for environments with very abrasive dust, screen covered with a fine layer of tempered glass, allows operation with deep scratches.

## Environmental specifications

| Product     | Fix | Mobile | Interior | Exterior | Dust | Water <sup>2</sup> | Operating temperature °C <sup>1</sup> | Storage temperature °C | Relative Humidity (without Condensation) % |
|-------------|-----|--------|----------|----------|------|--------------------|---------------------------------------|------------------------|--|
|             |     |        |          |          |      |                    |                                       |                        |  |
| TermiCom PM | X   |        | X        |          | X    | X                  | 5° to 40°                             | -20° to 60°            | 20 to 80                                   |

<sup>1</sup> Maximum temperature (temp. **inside** the control panel)

**IMPORTANT:**

\* Do not cover while the unit is ON. Keep all surfaces clear at all times

<sup>2</sup> Only the front is watertight and can be watered if properly installed.

## Main characteristics

### TermiCom PM 19"

| # Product      | Comm.    |         | Color touch screen               | Windows operating system |                |               | RAM   |  | Storage     |  |                  | Inputs / Outputs    |           |             |               |              |           | Power requirement without peripheral (max.) |
|----------------|----------|---------|----------------------------------|--------------------------|----------------|---------------|-------|--|-------------|--|------------------|---------------------|-----------|-------------|---------------|--------------|-----------|---|
|                | Ethernet | 802.11B | 15" Ultra resistant <sup>1</sup> | XPe (XP Embedded)        | XP PRO English | XP PRO French | 2 gig |  | Flash 2 gig |  | Hard disk 80 GIG | Ethernet Port 1Gbit | USB Ports | Serial Port | Parallel Port | Audio output | SVGA port |   |
| 004-01230-2200 | X        | O       | X                                | X                        |                |               | X     |  | X           |  |                  | 2                   | 4         | 3           | 0             | 1            | 1         | 56W   |
| 004-01230-3200 | X        | O       | X                                | X                        |                |               | X     |  |             |  | X                | 2                   | 4         | 3           | 0             | 1            | 1         | 56W   |
| 004-01231-3200 | X        | O       | X                                |                          |                | X             | X     |  |             |  | X                | 2                   | 4         | 3           | 0             | 1            | 1         | 56W   |
| 004-01232-3200 | X        | O       | X                                |                          | X              |               | X     |  |             |  | X                | 2                   | 4         | 3           | 0             | 1            | 1         | 56W   |

O = Available Option

<sup>1</sup> Recommended for environments with very abrasive dust, screen covered with a fine layer of tempered glass, allows operation with deep scratches.

## Environmental specifications

| Product     | Fix | Mobile | Interior | Exterior | Dust | Water <sup>2</sup> | Operating temperature °C <sup>1</sup> | Storage temperature °C | Relative Humidity (without Condensation) % |
|-------------|-----|--------|----------|----------|------|--------------------|---------------------------------------|------------------------|--|
|             |     |        |          |          |      |                    |                                       |                        |  |
| TermiCom PM | X   |        | X        |          | X    | X                  | 5° to 40°                             | -20° to 60°            | 20 to 80                                   |

<sup>1</sup> Maximum temperature (temp. **inside** the control panel)

**IMPORTANT:**

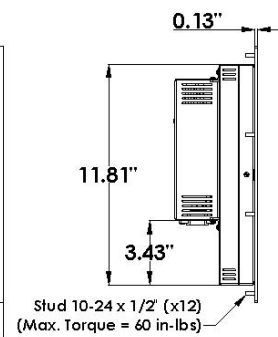
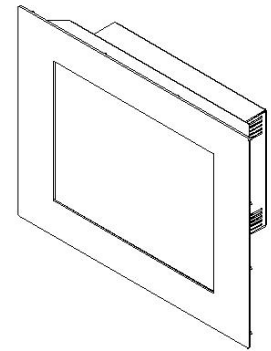
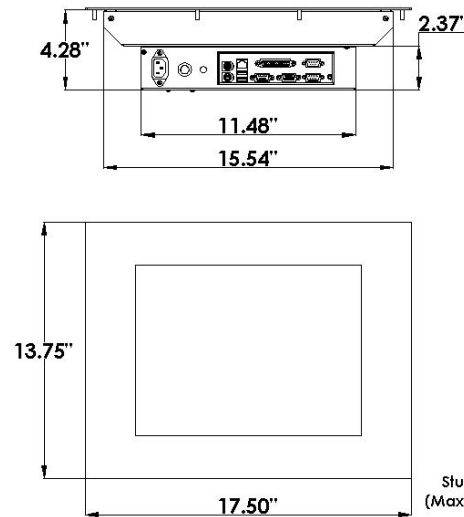
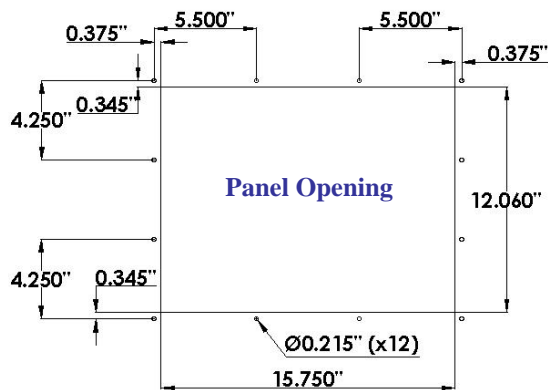
\* Do not cover while the unit is ON. Keep all surfaces clear at all times

<sup>2</sup> Only the front is watertight and can be watered if properly installed.

## Dimensions (in inches)

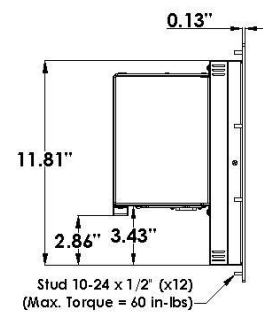
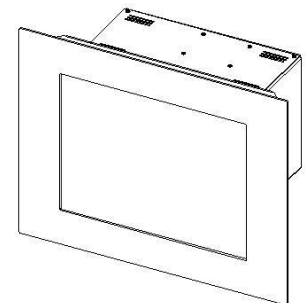
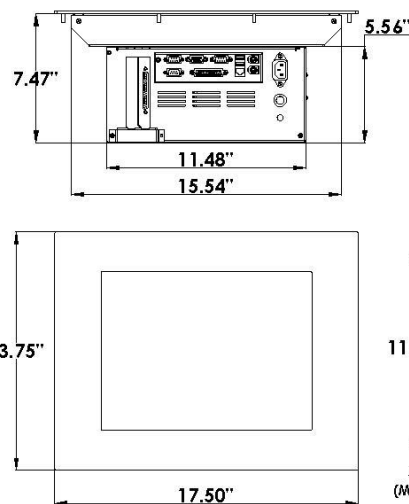
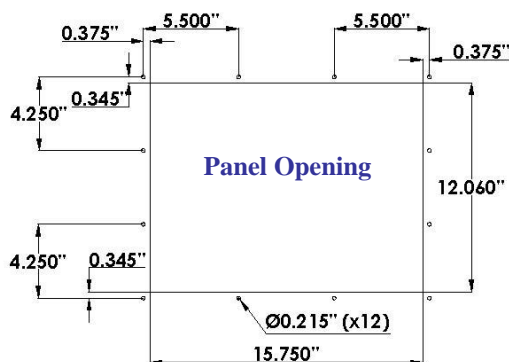
### TermiCom PM15

Weight= 15lbs



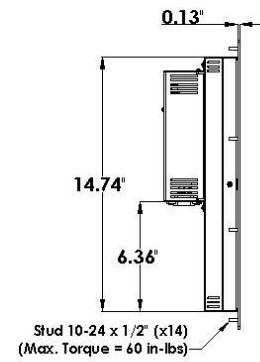
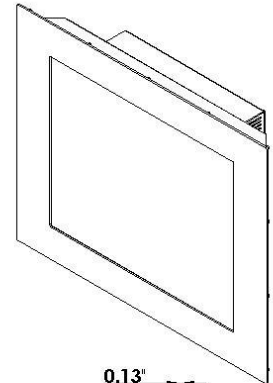
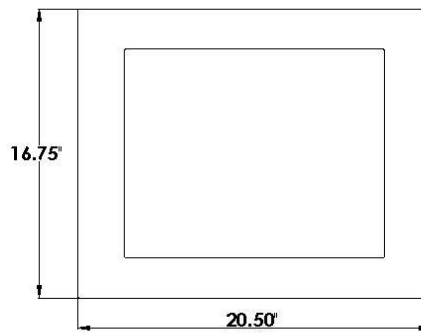
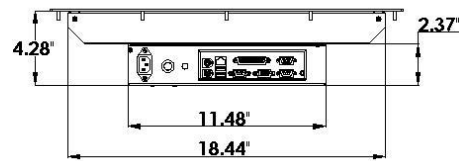
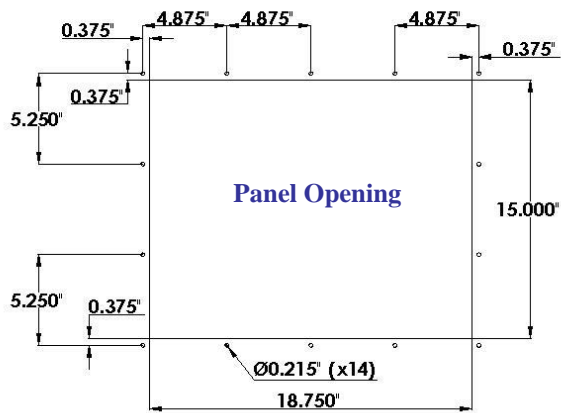
### TermiCom PM15+

Weight= 16lbs



## TermiCom PM19

Weight= 19lbs





## Power

The TermiCom PM can be powered from different sources (specify on order):



-An external 12VDC power supply provided (connects to a 120 or 240VAC power network)

-Input from 6 to 34VDC

-Input from 100 to 240VAC, 50-60Hz

The TermiCom PM+ *with faster processor* is only available with power input from 6 to 30VDC with screw terminal.



### WARNING: powering

Before installation, please turn off powering source. Plug the unit only when the installation is completed.



### WARNING: earth ground

Make sure that the TermiCom case is properly grounded.

## Options description

### RF option

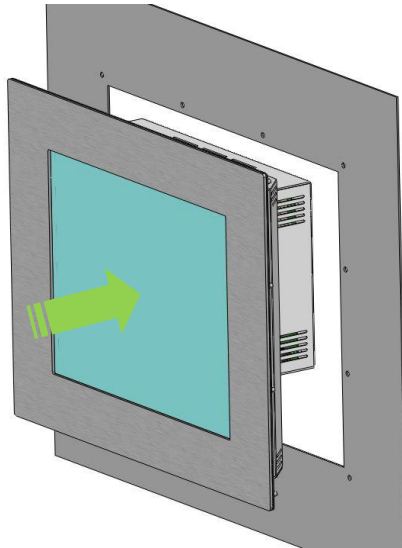
RF option (# OPT-802XPE) makes possible the use of TermiCom PM without network cable. The communication type Wi-Fi supports the 802.11 a/b/g. A minimum 802.11B Wi-Fi infrastructure is required.

Since the TermiCom PM is designed to be mounted on a control panel, an external antenna must be added if the panel is made of metal to allow the signal to get out.

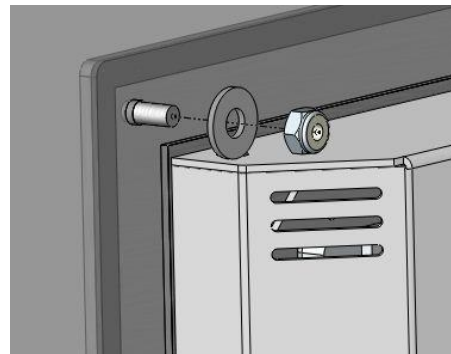
## How to install your TermiCom XPE

IMPORTANT: The TermiCom should not be cover while ON. The back of the TermiCom should not be placed flat on a table (or other surfaces), the back of the unit is acting as a heat dissipater.

### How to install TermiCom PM



**Figure 1**  
TermiCom PM side view



**Figure 2**  
TermiCom PM back view

1. Determine the appropriate emplacement (plane & motionless surface). **Be sure to choose a fixed and solid plane surface able to support the weight of the TermiCom.**
2. Cut the opening; refer to dimensions shown on pages 7 & 8
3. Insert the TermiCom PM in the opening taking care not to move or damage the seal
4. Install all washers and nuts provided

**ATTENTION:** Do not exceed the torque of 60 in-lbs (6.78Nm)

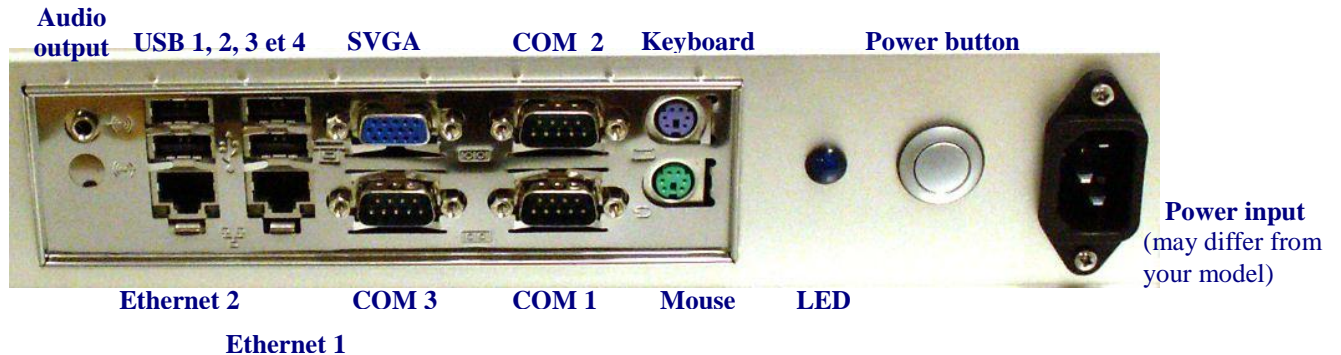


#### **WARNING: fixation & handling**

Choose a fixed and solid plane surface able to support the weight of the TermiCom (approximately 15 Pounds/6.8 Kg). Handle the TermiCom safely in order to avoid any back wound.

## Detailed Specifications

TermiCom PM is provided with several ports (see figure 3) allowing the connection of various types of peripherals according to needs, for example: printers, electronic scales, bar code scanners, sensors...



**Figure 3**

TermiCom PM connectors, bottom view  
Basic model with 120/240VAC power input shown  
May differ from your model

**Power input:** Allows to connect to a 120V or 240VAC power network.

**Power button:** Allows the TermiCom PM to be powered ON or OFF.

**LED:** The blue LED indicates when the unit is ON.

**Keyboard/Mouse:** PS/2 type connectors to plug a keyboard/mouse.

**COM 1-2-3:** RS-232 serial ports allow to connect peripherals like printers, scales, electronics automats... with a standard DB-9 type connector.

**SVGA :** Allows to plug a external SVGA monitor.

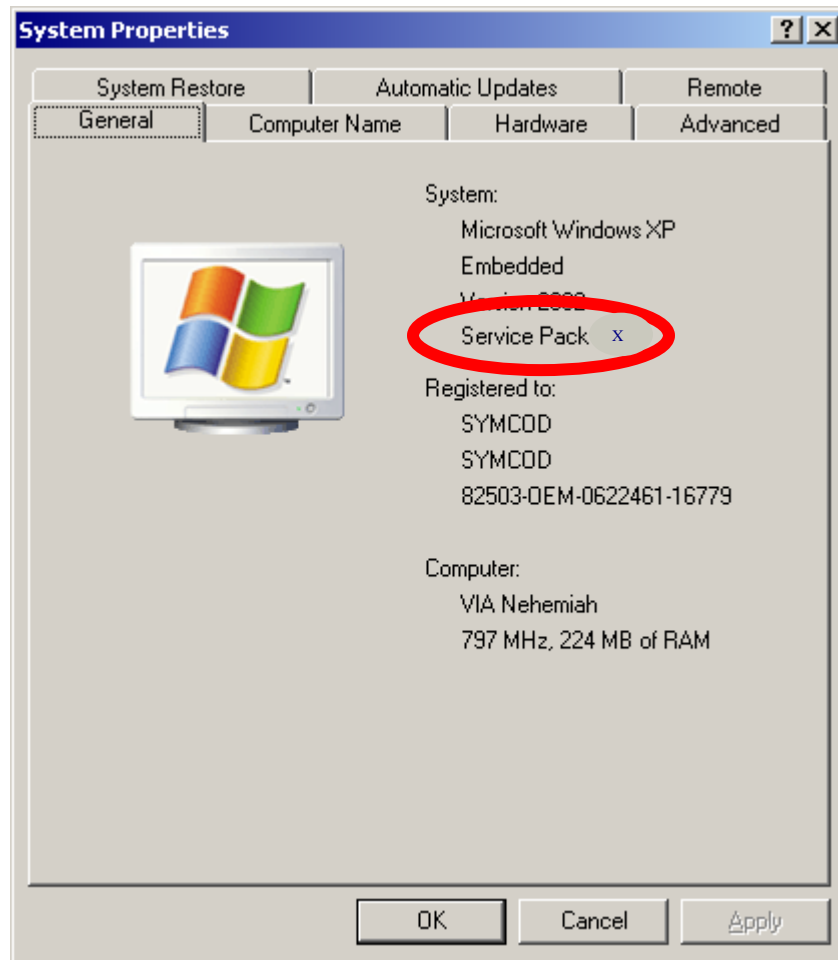
**USB 1-2-3-4:** Allow to connect USB peripherals. Accept type A USB connections.

**Audio output:** Allow to plug an external audio device (speakers).

**Ethernet 1-2:** Allow to communicate on the network through an Ethernet 1Gbit connection with a standard RJ-45 connector. As any Ethernet equipment that uses cable UTP Cat5, a maximum of 300feet (91.44 meters) of cable is allowed between the "hub" and/or the "switch" and the TermiCom. For more details concerning wiring, please download the document "WIRING AND EXAMPLE OF CONFIGURATION TCP/IP" available on [www.symcod.com](http://www.symcod.com) .

## TermiCom PM configuration

### Operating system



**Figure 4**  
Service pack version

The basic operating system of the TermiCom PM is Windows XP Embedded which is a reduced version of Windows XP Professional. To check the version of the service pack of your Windows XPe, please refer to your system properties (Start/Settings/Control panel/System/General - figure 4). **The Windows XP Embedded included in the TermiCom PM is specifically designed to work with the TermiCom and cannot in any case be transferred on another computer.** TermiCom PM can also support the complete version of Windows XP Professional. In this case, the PM will be provided with a hard disk.

### **ADMINISTRATOR authentication**

By default, the TermiCom PM is authenticated as a user without privileges. To authenticate yourself as an administrator, you must at start (when the desktop background of Windows appears with the cursor) hold the "Shift" key of your keyboard until the window of authentication appears. Then, enter the term "Administrator" in the "user name" and "Password" field (You must respect lower and upper case).

\* If you do not want to restart your computer, log off while holding inserted the button "Shift".

### **Software or driver addition**

To add a driver or software to the TermiCom PM it is necessary to be authenticated as administrator (see ADMINISTRATOR authentication section). The file transfer can be easily done. You can use any peripheral connected on one of the USB port (CD reader, disk drive, USB "Flash" disk) or use the Ethernet network. Since Windows XP Embedded does not contain all the components and drivers of Windows XP Professional, it is possible that your software requires a missing component; this will generate an operating error in the software. If it is the case, please address an email request to [support@symcod.com](mailto:support@symcod.com). A Symcod technician will be able to help you to identify the missing component.

### **Starting with "Safe Mode"**

In certain cases, it can be necessary to start Windows in "Safe Mode". To do so, let the computer start normally and type "MSCONFIG" in the field "Run..." of the Start menu. Select "Startup Diagnosis" and click on "ok". After a few seconds, you will be asked to start again, press "Restart". After the restarting, the system informs you that it is in diagnosis mode (being equivalent of "Safe Mode"). To return to "normal" mode, still use order "MSCONFIG" but select "Normal Startup" then start again.

## Recommendations

**Ethernet:** Before proceeding with the wiring installation, please consult “Ethernet wiring and recommendations TCPIP” (available at [www.symcod.com](http://www.symcod.com))

**Installation:** Do not cover while the unit is ON. The back of the TermiCom should not be placed flat on a table while the unit is ON. Keep the surfaces of the TermiCom free of any material.

## TermiCom PM maintenance



**Cleaning:** Anodise aluminum may react to some chemical agents, in particular with ammonia and with products containing hydroxide or certain acids. Stainless steel may react to some chemical agents, particularly with chlorine (Cl) component. Clean it with a soft soap or solvent to prevent the damage of the case. Once in a while, use air blast to remove dust.

## Certification

This equipment has been found compliant to class A Part 15 of FCC Rules. These limits are intended to get a reasonable protection against dangerous interferences when the equipment is used in an industrial or commercial environment. This equipment emits uses and can generate radiations of radio frequencies and can cause dangerous interference for radio communications if it is not used in accordance with the instruction manual. The use of this equipment is not planned for a residential use.

## Troubleshooting

| Problems  | Solutions   |
|---|---|
| I am unable to reach or modify the system options                 | At start, the TermiCom PM is authenticated as a user without privileges. To authenticate you as an administrator, refer to the “ADMINISTRATOR authentication” section.  |
| I saw the LED lights but there is no screen display               | Unplug the 120V power for 10 seconds, plug the XPe. If there is no improvement, sent a request including the serial number and the detailed description of the problem to technical support at <a href="mailto:support@symcod.com">support@symcod.com</a> . |
| "DLL missing", error displayed at software or driver installation | Extract a DLL file from another computer working with Windows 2000 or XP. Copy this file in the repertory specified in the error message (usually on C:\windows\system32\)  |

## Accessories & options



**Figure 5**

- 1- Tool balancer
- 2- Powerscan scanner



**Figure 6**

SKT silicone keyboard  
Sealed rigid casing

| # product         | Description  |
|-------------------|--|
| <b>OPT-802XPE</b> | RF option, 802.11b, 5.5 dBi antenna  |
| <b>008-01820B</b> | SKT Keyboard, USB, sealed, silicone (See figure 6)                                 |
| <b>201-58064</b>  | PSC Powerscan scanner, industrial, standard range, with USB cable (See figure 5-2) |
| <b>508-58001</b>  | Tool balancer for scanner (See figure 5-1)   |
| <b>203-01001</b>  | Aluminium touch pen, Teflon tip, wire & holder                                     |

## Dictionnary

|                           |   |
|---------------------------|---|
| <b>Authentication</b>     | Procedure that allows checking or validating the identity of a person or the identification of any other entity, during an electronic exchange, to control network access, system information processing or software.   |
| <b>Resistive (screen)</b> | Can function with finger or object pressure (pencil...)   |
| <b>Flash disk</b>         | Data storage piece made without any mobile hardware element. Can store data over several years without being powered by electricity.  |
| <b>Peripheral</b>         | External device connected to the central processing unit. Can ensure the entry or the exit of data.   |
| <b>Driver</b>             | Control program which translates the orders of a software in order to make possible the communication between the computer and a peripheral.  |
| <b>Operating system</b>   | Computer basic software intended to order the execution of programs by ensuring the work management, the input-output operations on peripherals, the resource allocation to the various processes, the access to program libraries and files, as well as the accountancy of work. |

## Service and support

### Support

Please use **EMAIL** for your requests.

- For **technical questions** (hardware and software), email at [support@symcod.com](mailto:support@symcod.com)
  - Provide a detail description of the problem and/or questions (intermittent problem happens when...)
  - Please indicate model number and serial number (if applicable).
- For **all other questions**, please use [symcod@symcod.com](mailto:symcod@symcod.com) or Symcod Inc. at

1171 Notre-Dame O., Victoriaville, Qc, G6P 7L1  
 Phone: 1-800-203-9421, 1-819-751-0095  
 Fax: 819-751-1292

### Return Merchandise Authorisation (RMA)

All return request must be authorized by SYMCOD Inc. To do so please refer to the following:

<http://www.symcod.com/rma>

- You will receive a formal confirmation number (# RMA)
- The RMA number must be printed on each box.
- All freight charges are at the customer expense and responsibility. Please take note that “collect” package will be refused.