Visonic PowerManage Lite Pre-Installation Requirements and Specifications

Preface

This document provides details and defines the requirements needed on the customer side prior and during a Visonic PowerManage server installation.

The installation will be performed by a Visonic engineer.

The customer is required to read the relevant sections throughout the entire document and to verify to the point of contact at Visonic that all of the requirements will be met on the installation date.

Hardware

The following hardware will be provided by Visonic:

Dell OptiPlex 790

- Form Factor: SFF
- Dimensions (HxWxD, cm): 29 x 9.26 x 31.2
- Chipset: Intel Q65 Express
- Processor: Intel Core i3-2120 (3.30 Ghz)
- RAM: DDR3, 2 GB
- Disk Drives: 500GB SATA 3
- Extra Serial Port
General

Make sure you have enough room in your designated server rack for the server and at least one free power outlet. More outlets may be required according to the server configuration that is explained in this document.

Network & Firewall

Visonic recommends connecting the PowerManage behind a firewall or a NAT device and using a restrictive policy for access; the PowerManage server is not secured against Internet attacks. For support purposes, it is recommended to allow access from Visonic's address range 91.207.90.0/23.

- Allocation of 1 fixed public IP address.
- DNS hostname with A and PTR records for the allocated IP address, this should be done by whoever is in charge of your domain whether it's your IT department, your ISP or an online DNS registrar.
- A symmetric uplink connection of 1 Mbit is required at all times
- No blocking of outgoing server connections to the Internet
- The server receives control panel events via TCP and UDP ports 5001 and 8080; these must be accessible from the Internet.
- The web management interface of the PowerManage server can be reached by port 80. The back-end management interface is accessible on port 22 (SSH).
CMS Software

This section applies when connecting Visonic's PowerManage server using a serial/TCP port to a server running CMS software for reporting.

- The supported protocols are: Contact ID, SIA Level 2, FEP (Bold Manitou), VisNAP.
- Allocate a serial or any TCP port for the connection on your CMS server.
- When using a serial connection:
  - Have a serial cable ready for the installation. In most cases, it will have to be a crossed cable.
  - Make sure you know the serial connection details for your CMS server, the common settings are:
    - Baud: 9600
    - Data bits: 8
    - Parity bit: None
    - Stop bit: 1
PowerLink (Broadband)

This section applies when using control panels that connect to the server using a PowerLink broadband adaptor.

URL Redirection

The server is able to provide a name based redirection service for end-users, allowing them to get to their PowerLink unit's login page from anywhere on the Internet.

This functionality can be achieved by entering the PowerManage's hostname into the browser along with the user's PowerLink ID in the following format:


For example:

http://secure.visonic.com/JohnDoe

For this function to work, incoming internet traffic to the server's TCP port 80 must not be blocked.

PowerLink Firmware Upgrade

The server is able to upgrade the firmware of PowerLink units that are connected to it. The PowerLink unit connects to the server via FTP and downloads a firmware image which it then applies onto itself.

For this process to work, FTP ports (TCP 20 and 21) on the PowerManage server must be accessible from the internet.
Remote Control Panel Configuration over GPRS

This section applies when performing remote configuration of control panels that connect to the server using GPRS communication or when using the backup SMS receiver.

The following hardware will be supplied by Visonic:

- 1 Cinterion GSM modem
- 1 GSM Antenna for Cinterion GSM modem
- 1 Type C (European) power adaptor – contact Visonic sales for alternatives.

The GSM modem has two functionalities:

1. "Wake up" control panels by a voice call and make them connect to the PowerManage server via GPRS.
2. SMS Receiver backup* function.

Requirements:

- 1 Free power outlet for the GSM modem.
- A SIM card with voice call and SMS receiving capabilities is required; make sure that the SIM card is in a post-paid and not a pre-paid plan to avoid issues.
- Make sure that the SIM card does not require a PIN code to be entered before it can be accessed.
- GPRS capability is not required for this SIM card.
- Make sure you note the phone number on this SIM card as it will need to be entered upon a security system installation.
- Good reception of the GSM network at the installation site.

* SMS receiver function should only be used as a backup receiving interface and not as the primary as it can only be used for a small number of control panels simultaneously.
**Messaging**

PowerManage supports the dispatching of e-mail, SMS and MMS messaging as notifications for end-users about security system alarms or alerts. Email is also used to report server warnings and faults to the server administrator via email.

**Email**

E-mail dispatching can be done in two ways:

1. **PowerManage** will perform mail delivery directly to the recipient's mail server. This option requires the following prerequisites:

   - A and PTR type records, specified in the "General" section of this document, must exist.
   - *An MX type record should be set on the server's DNS domain with the correct hostname.
   - Outgoing communication from the server to TCP port 25 must not be blocked on your network or on your ISP's public network.

   * If another mail server exists on the same domain, make sure to set the "preference" field accordingly so that PowerManage gets the lowest priority – this means a higher preference number.

2. **PowerManage** will relay the e-mail messages to another mail (SMTP) server to perform the delivery; this option requires the following prerequisites:

   - The e-mail messages will be relayed to the mail server by using it's hostname and not it's IP address.
   - PowerManage currently supports the following SMTP authentication methods: PLAIN, LOGIN, DIGEST-MD5, CRAM-MD5.
During the installation

A local network engineer must be available at the time of installation.

In most cases, the following equipment will be on site during the installation:

- QWERTY keyboard, either USB or PS/2
- Monitor
- In order to verify proper service functionality, a Visonic control panel with a communication module is required; this can be either a PowerLink with a separate, working Ethernet link or a GSM module with a GPRS SIM card.
Appendix A: Summary Table of Transport Layer Session Parameters

**PowerManage**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Initiator</th>
<th>Proto.</th>
<th>PowerManage Port</th>
<th>Peer Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPRS events</td>
<td>Remote</td>
<td>TCP</td>
<td>5001</td>
<td>N/A</td>
</tr>
<tr>
<td>GPRS events</td>
<td>Remote</td>
<td>TCP</td>
<td>8080</td>
<td>N/A</td>
</tr>
<tr>
<td>GPRS event video</td>
<td>Remote</td>
<td>TCP</td>
<td>8080</td>
<td>N/A</td>
</tr>
<tr>
<td>PowerLink events &amp; video</td>
<td>Remote</td>
<td>TCP</td>
<td>21</td>
<td>N/A</td>
</tr>
<tr>
<td>PowerLink software upgrade (FTP)</td>
<td>Remote</td>
<td>TCP</td>
<td>20</td>
<td>N/A</td>
</tr>
<tr>
<td>Web based interface (HTTP)</td>
<td>Remote</td>
<td>TCP</td>
<td>22</td>
<td>N/A</td>
</tr>
<tr>
<td>Health monitoring (SNMP)</td>
<td>Remote</td>
<td>UDP</td>
<td>53</td>
<td>N/A</td>
</tr>
<tr>
<td>Domain Name lookups (DNS)</td>
<td>PowerManage</td>
<td>UDP</td>
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<tr>
<td>System clock update (NTP)</td>
<td>PowerManage</td>
<td>UDP</td>
<td>N/A</td>
<td>21</td>
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<tr>
<td>Control panel template updates (FTP)</td>
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<tr>
<td>Control panel template updates (FTP Data)</td>
<td>PowerManage</td>
<td>TCP</td>
<td>N/A</td>
<td>25</td>
</tr>
<tr>
<td>E-mail notifications (SMTP)</td>
<td>PowerManage</td>
<td>TCP</td>
<td>N/A</td>
<td>25</td>
</tr>
</tbody>
</table>

1 Can be changed upon request

**ILO**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Initiator</th>
<th>Proto.</th>
<th>PowerManage Port</th>
<th>Peer Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web based interface (HTTPS)</td>
<td>Remote</td>
<td>TCP</td>
<td>443</td>
<td>N/A</td>
</tr>
<tr>
<td>Text based interface (SSH)</td>
<td>Remote</td>
<td>TCP</td>
<td>22</td>
<td>N/A</td>
</tr>
<tr>
<td>Remote Console (HP Proprietary)</td>
<td>Remote</td>
<td>TCP</td>
<td>23</td>
<td>N/A</td>
</tr>
</tbody>
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