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Operating Instructions for Watchman Bluetooth® People Counter
(BTPC Version 14.0)

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Congratulation on purchasing the exciting new Watchman Bluetooth® People Counter. You will find it a valuable tool in improving customer service & sales conversions, which should translate into increased revenue & profits.

1. Watchman Bluetooth® People Counter - Contents of Package - Please check your package for the following parts

- Watchman Bluetooth® People Counter sensor unit in plastic case
- USB Dongle – *(part of the Bluetooth® system with our Watchman Electronics logo sticker on it)*
- 9 volt DC power supply adaptor *(Not included for supplies to the US)*
- USB extension cable
- A packet of 3 screws for installing the sensor unit above the doorway
- Watchman Bluetooth® People Counter BTPC V14.0 Software - installation CD
- **Note:** Multiple installations for networking may not have a CD as the software will be loaded by Network Administrator



If you are missing any of the parts, please contact Watchman Electronics immediately –
Phone +646 755 0507 or email: sales@watchmanproducts.com

2. Minimum system requirements for the Watchman Bluetooth® People Counter:

- Processor: Intel* Pentium or equivalent processor of capacity 1 GHz or higher
- Operating system: Microsoft* Windows 8 (or older versions such as 7, Vista, or XP).
- **NOTE:** This product is not compatible with Windows 2000 or earlier versions.
- Hard drive memory: Free space of 500 MB or more
- DVD or CD reader
- Microsoft Office Software with Microsoft Excel

3. Technology & application

- The Watchman Bluetooth® People Counter uses Bluetooth® 4 technology to transmit data from the sensor unit to the PC
- **NOTE:** The guaranteed range of the system from the sensor unit to the PC is 20 meters straight line of sight
- In some instances it might be possible to achieve a longer range, but this is not guaranteed
- If the PC is located behind walls or in a different floor, the effective range of Bluetooth® could be reduced
- The sensor is Passive Infra-Red (PIR)
- This works by detecting body heat (change in heat in the room)
- The range of the PIR sensor is about 5 meters (16 feet)
- PIR is NOT a “beam” and it does not need a reflector
- PIR will not work through glass, plastic etc. It needs direct open access to the people it detects



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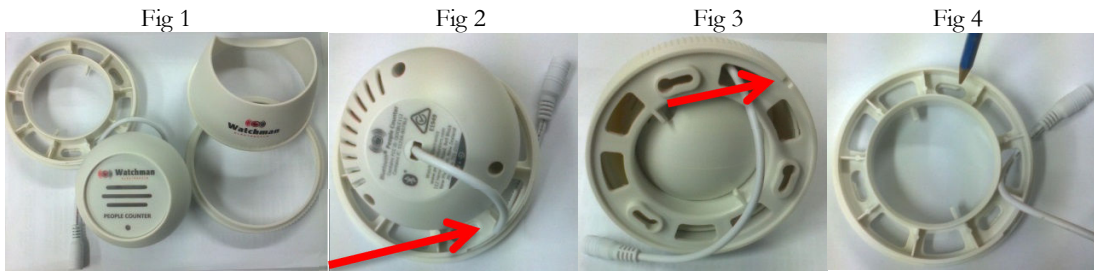
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4. Principle of Operation:

- The Watchman Bluetooth® People Counter uses a “Passive Infrared” (PIR) **Sensor unit** to detect people. When it detects a person, it sends this information to the USB Dongle – (part of the Bluetooth® system) which is plugged into your PC’s USB port. This signal information is converted into a form that can be saved as a file in the computer. The saved data can then be extracted, analysed and interpreted by a spreadsheet or any other appropriate software.
- Watchman Bluetooth® People Counter’s BTPC V14.0 software has two options of saving the data
 1. In a CSV file
 2. In a SQL table that can be integrated with SQL database
- This is explained in greater detail below

5. Watchman Bluetooth® People Counter sensor unit installation:

- The Watchman Bluetooth® People Counter system is a wireless model using Bluetooth® technology to communicate with your computer
- Step 1 – Twist the lock ring and open the sensor unit which consists of 4 parts – Fig 1
 - The base – which needs to be screwed to the wall above your doorway where you wish to count foot traffic
 - The sensor ball – which contains the main electronic assembly unit
 - The cup which holds the ball in place
 - The lock ring that holds the entire sensor unit to the base on the wall
 - **WARNING** - Do not open the screws that hold the sensor ball closed. Opening this might void your product warranty



- Step 2 – The sensor ball has a cable with a DC power socket attached.
 - Insert the DC plug through the outer part of the base – Fig 2 & Fig 3 below
 - Make sure that the cable is next to the groove on the base as shown by red arrows in Fig 3 below
 - Mark the 3 screw places on the wall above the door - Fig 4
 - Install it either in the corner or on the side of the doorway. (Fig 5 a or Fig 5 b)
 - **DO NOT INSTALL DIRECTLY ABOVE THE DOORWAY (Fig 5 c)**
 - The cable groove should point up towards the location of the power supply -
 - **IMPORTANT (Fig 5d):** If the doorway is narrow, make sure that the sensor does not detect people inside the store who are in the aisle beyond the door! **This will give your FALSE DATA.**
 - If the door is a narrow single door, ALWAYS install as per Fig 5 a - on the top corner and point to the opposite bottom corner so that the sensor will not detect customers in the aisles of the store



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- Step 3 – Use a 3mm drill bit to drill the 3 marked holes – above the doorway
 - Screw in the 3 screws provided so that about half of the screw is exposed
 - Place the base over the 3 screws as indicated above with the cable groove with the cable pointing towards the power supply source (Fig 3) **and twist the base to lock firmly** on the wall
 - Make sure that the DC socket and cable are correctly positioned as per Fig 4
- Step 4 – Place the ball, cup & lock ring on the base and twist the lock ring until it is partly closed & the ball & cup can still be moved
 - The ball and cup can be adjusted now to align with the doorway
 - Once the sensor is aligned correctly, turn the lock ring to firmly close the sensor unit
- Step 5 – Plug the DC power pack to the wall socket and make sure it is switched off
 - Plug the DC power pack into the DC socket of the BTPC sensor unit
- Step – 6 – Plug the Bluetooth® USB dongle into the PC

NOTE: PLEASE ENSURE THAT THE SENSOR IS ORIENTED CORRECTLY SO THAT IT DETECTS PEOPLE

When installing the sensor above the door or on the side, please make sure that the window slots are aligned correctly as shown in the figure.



**Correct
orientation
of sensor
window**



**Wrong
orientation
of sensor
window**

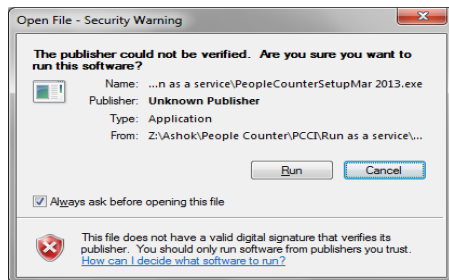
6. BTPC V14.0 – Watchman People Counter BTPC V14.0 Software installation - NEW INSTALLATION – CSV File

- You have **TWO OPTIONS** for recording data

1. CSV file format
2. SQL table format

- **NOTE: THE BELOW INSTRUCTION FOR CSV FILE FORMAT ONLY**

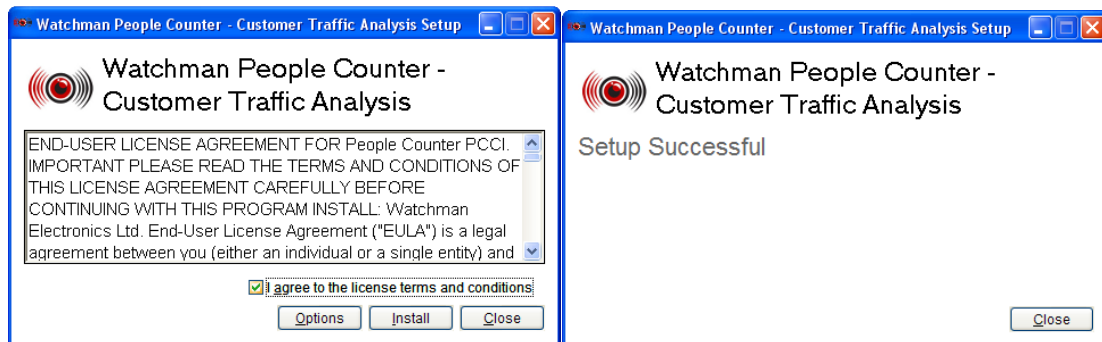
- If this is a new installation, continue with the following steps
- The software can be installed either from the enclosed CD or from the link on the website www.peoplecounters.com
- Click on the “Download” link
- If installing from the CD, the install program will automatically run once the CD is loaded
- When a dialog box pops up, click “save to file” and keep a record of where it is saved



- Access the saved download file and double click the file
- If a pop up box comes up, click “yes” or “run”

- After running the download, the below dialog box will appear.

1. Tick box to accept licence terms and conditions
2. Click “Install” button

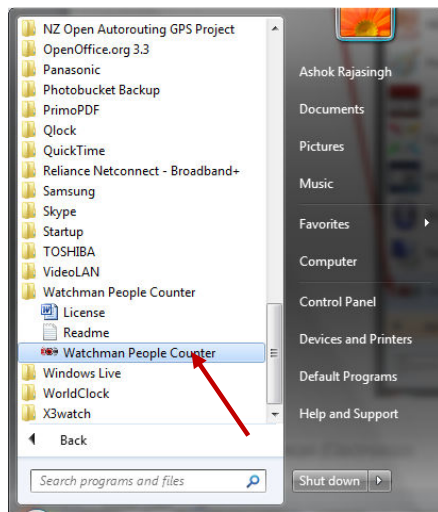


- The program will be installed
- To start the program’s operation & setup, click on “Start” button of your PC
- The below dialog box will appear. You will need to look for it under “All programs” and “Watchman People Counter”
- Click on the icon to run the program



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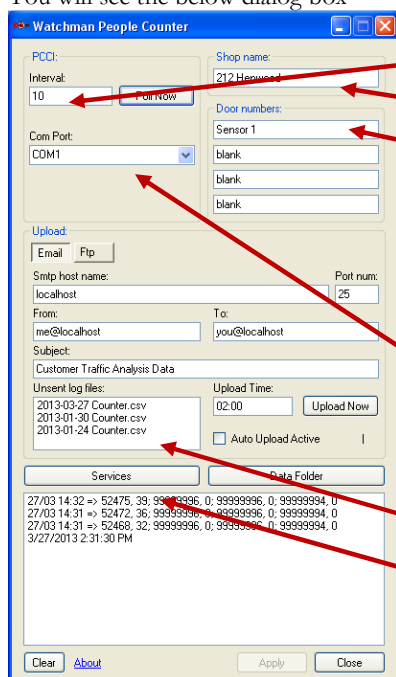
7. UPGRADE from any earlier version of Watchman People Counters Software to BTPC V14.0 - CSV File

- Before installing this version **BTPC V14.0**, you will need to **uninstall the earlier version** of Watchman People Counter software
- Then follow step 6 above

8. Configuring the Watchman People Counter BTPC V14.0 software – CSV File

- Please turn the power on (at the wall) for the power pack and ensure it is connected to the PC.
- **Note:** The Watchman People Counter BTPC V14.0 software program uses the Time and Date as set in the computer. ***Please make sure that the date and time are correct before running the software.***
- Make sure that the Bluetooth® USB dongle is plugged into a USB port in the PC
- Confirm that the PC is located in direct line of sight and within about 20 meters from the sensor
- Double click “Watchman” icon to run the software as per step 6 above.

You will see the below dialog box



- Select the time interval in minutes; default setup is 10 minutes. We recommend 30 minutes or 60 minutes
- Enter a name for your Store (maximum 12 characters – example “Shoe Shop”)
- Select a name for the door (maximum 8 characters – example – “Sensor 1”). If you do not enter the Door name, the system will by default record the Serial No. of the Bluetooth® devise.
- **Note:** The **BTPC V14.0** software is capable of handling a maximum of 4 sensors. If your **BTPC V14.0** is equipped with only one sensor, then it is defaulted to input 1 – door 1
- Select the communication port (if using the USB port, the operating system allocates the port number and for example it could be COM1). Therefore, it is important that you try all the available ports to get to the correct one.
- CSV File names
- At the bottom window you will see raw data coming in
- See step 10 below for configuring data file transfer

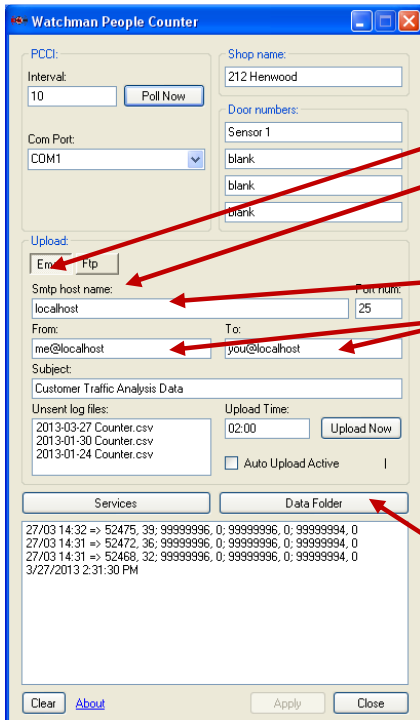


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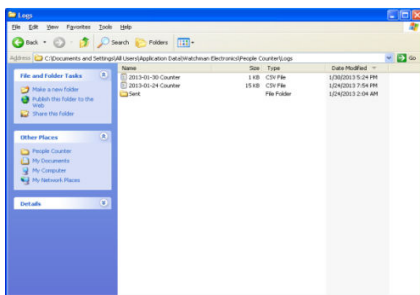
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9. Data File storage & transfer – CSV File

- The CSV file can be transferred in 2 ways
 - i. By Email
 - ii. By File transfer Protocol (FTP) by an IT Professional
- The Watchman People Counter program creates a CSV data file when it is started
- The file name will be according to the date (as selected from the PC)
- The system can be set up / configured to automatically transfer the data file each day to a remote location such as Head Office



- The data file can be sent by email automatically each night
- If you wish to use email, Click the “Email” tab
- If you wish to use FTP (File transfer Protocol) to transfer the data file to an external server, contact an IT professional (click FTP tab)
- Enter the SMTP server name
- Enter the email ID of the PC and the email address of the person you want to send the file to
- If the PC is switched off, any unsent files will be sent as soon as the PC is switched on & the programs starts running
- Unless you are a competent IT professional, DO NOT click “Services” tab or change any setting within
- Click the “Data Folder” tab and see below dialog box with the data files



- After the data is transferred by email at night, the data file will then be moved to a “Sent” folder (see below)
- Periodically delete these old files or archive them if you want to.
- **NOTE:** A new CSV data file is automatically started each day at 12:00 midnight
- **NOTE:** Do not leave the CSV file open. The system cannot poll and record data to an open file

10. Calculating the count

- The sensor does not differentiate between incoming and outgoing traffic.
- Therefore **you will need to halve the total count** when calculating the number of customers for the day.
- The sensor cannot differentiate between individuals in a group of people and may count one or a few more, but not every individual in the group.
- The minimum time lag between persons entering should be approximately 1 second.

11. Integrating the Watchman Bluetooth® People Counter (BTPC) data with your business system

- The CSV file is compatible with any standard database and the information can be easily integrated with your business reports.
- See sample spread sheet attached in CD



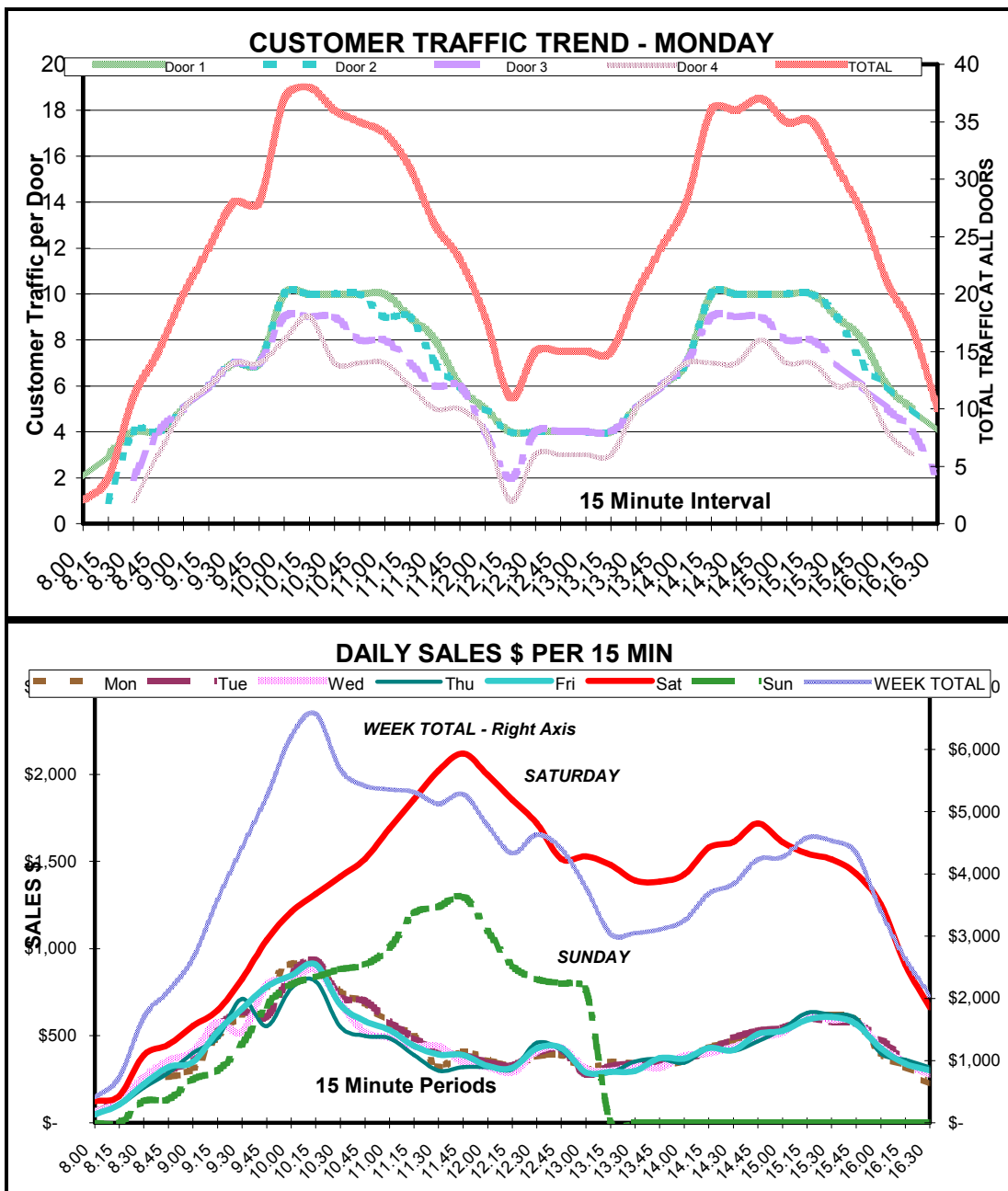
12. SQL Table option

- The Watchman Bluetooth® People Counter (BTPC) can be installed to record data in a SQL Table for integration with your SQL Server database
- At the time of installation, choose the SQL Table option instead of the above CSV File option
- It is compatible with any standard database and the information can be easily integrated with your business reports.

Below are some examples of analytical graphs that can be used for business decisions.

13. Data analysis

The data from the PCCI system can be integrated with your own system's data to provide other analysis such as sales per staff, sales per person hour, sales during promotion programs, conversion rate of customers during promotions versus other times etc.





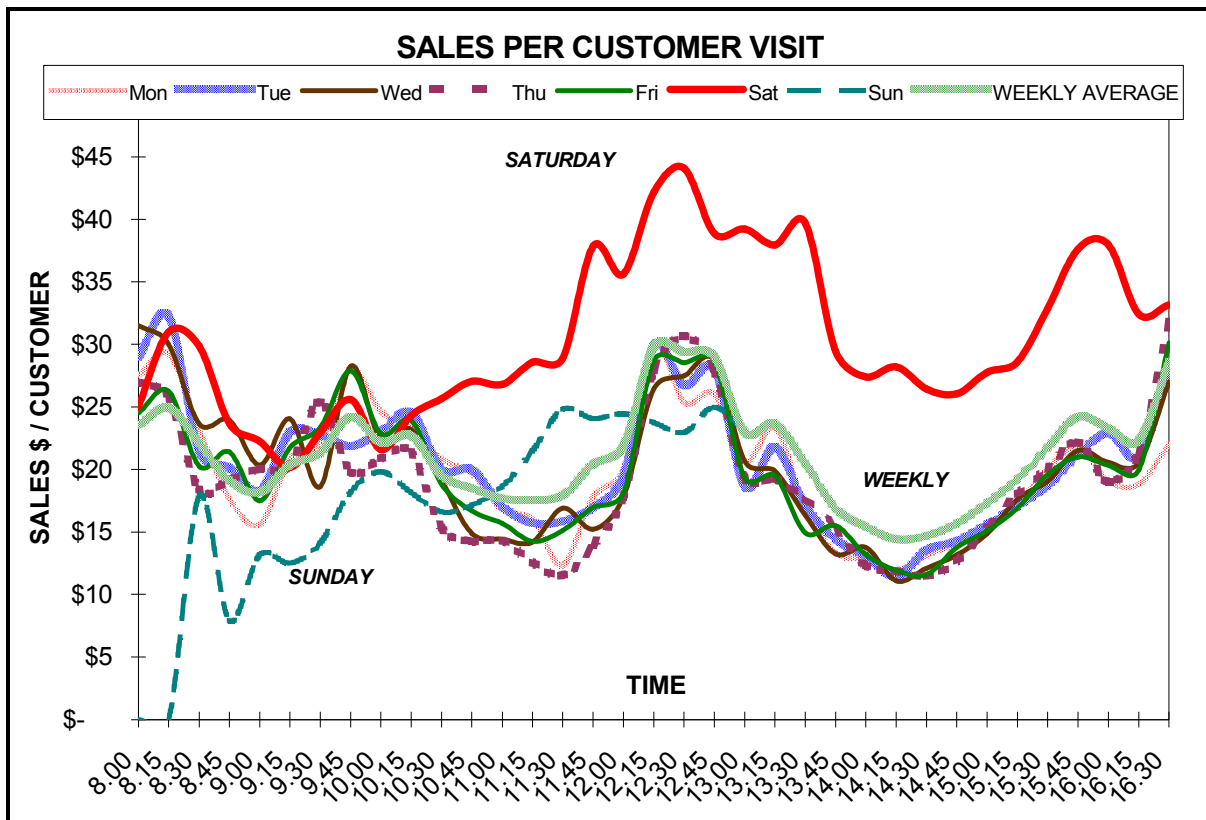
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- You could also use this information (PCCI data about customer traffic & your data about staff times) to plan your staff
- rosters, part-time staff, staff overtime etc.

Increased Profits

- If you apply the tool correctly, you should be able to identify the areas to focus on and improve your customer service, revenue & profits.



14. DISCLAIMER:

Any recommendations & suggestions given along with this product are of a general advisory nature only. They **should not** be assumed to be complete and absolute in themselves, as we do not have any control over the business of our customers. Please obtain advice on your business from competent sources & conduct your analysis accordingly. **Watchman Electronics & its associate companies do not accept any liability** for any financial loss or any other damage caused by the use of this product or any analysis there of.

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