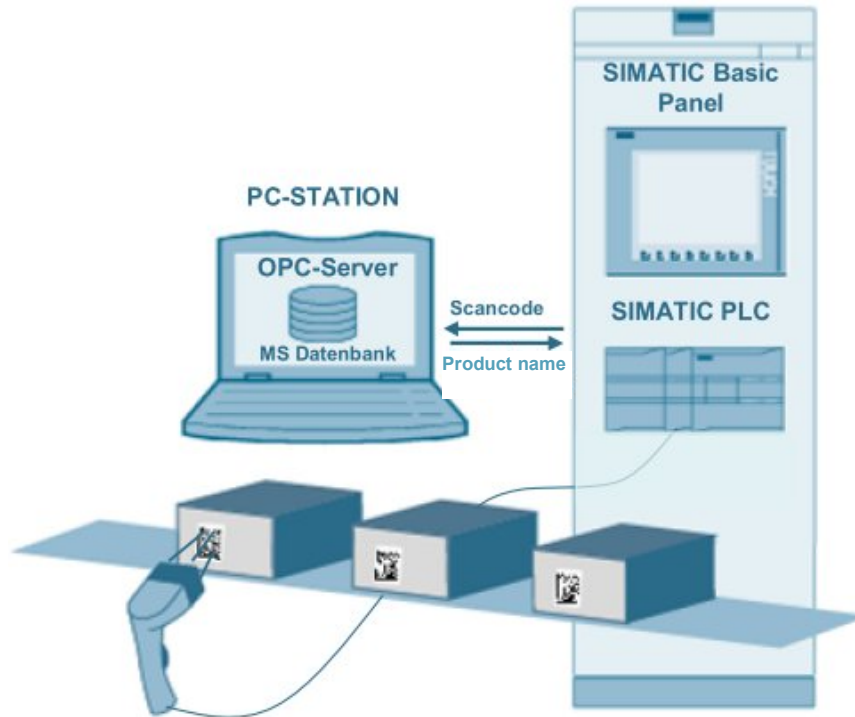


# Set 27 - Reading Data Matrix Codes with S7-1200 and Archiving them in a Database

## Task



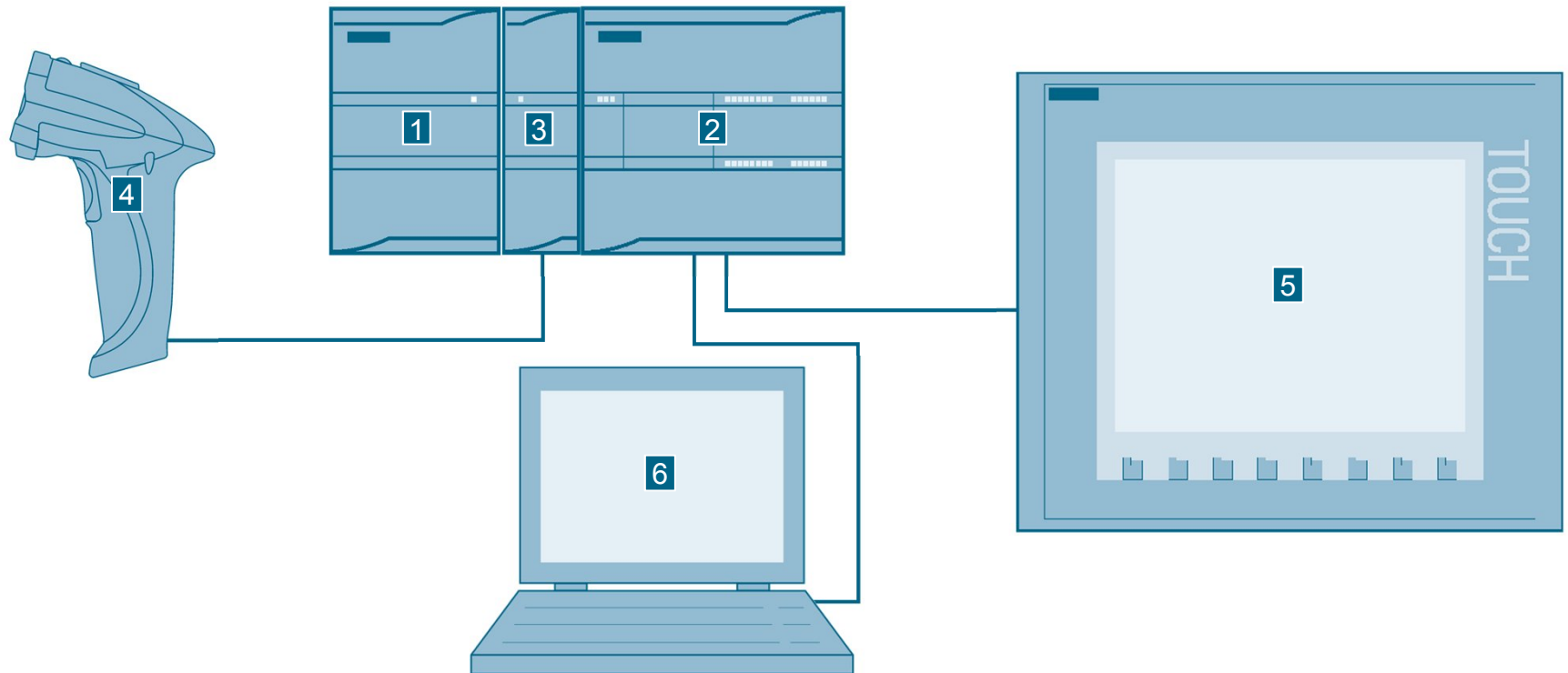
- Capture supplied objects through data matrix codes by means of a manual scanner
- Reading and transmitting the code information to a PC station by an OPC server
- Returning product information to an HMI panel to be identified by the operator
- Archiving the scan procedure with a time stamp in an Access database to be reviewed later on

Scan the  
code  
to get more  
information!



# Set 27 - Reading Data Matrix Codes with S7-1200 and Archiving them in a Database Automation Solution






SIEMENS



- |   |                      |   |             |   |                  |   |                |   |                |   |         |
|---|----------------------|---|-------------|---|------------------|---|----------------|---|----------------|---|---------|
| 1 | S7-1200 power supply | 2 | S7-1200 CPU | 3 | CM 1241 - RS 232 | 4 | SIMATIC MV 340 | 5 | KTP 1000 Basic | 6 | PG / PC |
|---|----------------------|---|-------------|---|------------------|---|----------------|---|----------------|---|---------|






# Set 27 - Reading Data Matrix Codes with S7-1200 and Archiving them in a Database

## Main Components

		Product	Function description
1		<b>Power supply PM 1207</b>  <b>Article no.</b> <b>6EP1332-1SH71</b>	<ul style="list-style-type: none"> <li>• Supplying the control unit with 24V DC</li> </ul>
2		<b>CPU 1214C DC/DC/DC</b>  <b>Article no.</b> <b>6ES7214-1AE30-0XB0</b>	<ul style="list-style-type: none"> <li>• Extracting the data from code contents</li> <li>• Transmitting the extracted data to the PC station</li> <li>• Receiving the pertinent product information from the PC station stored in the data base</li> </ul>
3		<b>CM 1241 RS232</b>  <b>Article no.</b> <b>6AG1241-1AH30-4XB0</b>	<ul style="list-style-type: none"> <li>• Receiving the code contents</li> </ul>
4		<b>SIMATIC MV 340</b>  <b>Article no.</b> <b>6GF3340-0HT01</b>	<ul style="list-style-type: none"> <li>• Scanning the code</li> <li>• Transmitting the code contents to the S7-1200</li> </ul>
5		<b>SIMATIC KTP1000 Basic</b>  <b>Article no.</b> <b>6AG1647-0AE11-4AX0</b>	<ul style="list-style-type: none"> <li>• Displaying current status messages</li> <li>• Displaying code and product information</li> </ul>

# Set 27 - Reading Data Matrix Codes with S7-1200 and Archiving them in a Database

## Main Components

		Product	Function description
6		<p>Any PG / PC with Windows 7 32 Bit</p> <p>Meeting the software system conditions</p>	<ul style="list-style-type: none"> <li>• Providing an OPC server</li> <li>• Executing the MS database application</li> </ul>
		<p>Modem cable RS-232</p> <p>Article no. 6GF3 020-0AC40-0AC4 (EU) 6GF3 020-0AC40-0AC3 (USA)</p>	<ul style="list-style-type: none"> <li>• Connection between the control system and SIMATIC MV 340</li> </ul>
		<p>SIMATIC STEP 7 PROF. V13</p> <p>Article no. 6ES7822-1AA03-0YA5</p>	<ul style="list-style-type: none"> <li>• Configuration and programming of the S7-1200 and the KTP 1000 Basic</li> </ul>
		<p>SIMATIC NET SOFTNET-IE S7 V8.2</p> <p>Article no. 6GK1704-1CW08-2AA0</p>	<ul style="list-style-type: none"> <li>• Configuration of the OPC server</li> </ul>
		<p>Microsoft Office 2010</p> <p>To be ordered via Microsoft</p>	<ul style="list-style-type: none"> <li>• Configuration and programming of the MS Access Application</li> </ul>

# Set 27 - Reading Data Matrix Codes with S7-1200 and Archiving them in a Database

## Further Information

### Benefits

- Simple expansion of a production process for the documentation of the the quality of individual production sections
- The use of OPC server allows for a connection to various database systems

### Range of use

- Quality control
- Production
- Logistics
- Maintenance
- Inspection

### Sectors of industry

- Automotive and mechanical engineering
- Tobacco and food industry

### Similar topics

- Reading and processing RFID data with S7-1200 (Set 28, link: [38471716](#))

### Further information

- LOGO! and S7-1200 Sets: [www.siemens.de/support.automation.applikationen](http://www.siemens.de/support.automation.applikationen)
- Service and Support Portal: <http://support.automation.siemens.com/>

# Set 27 - Reading Data Matrix Codes with S7-1200 and Archiving them in a Database

## Security Information

For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>.