The World of S5/S7
Of course all online-functions are implemented. The new operational concept of version 6 has been developed on the basis of the latest cognitions in operator guidance. Block lists and symbolic tables for example can be arranged freely, they can be drawn in any order from the main window onto a second screen and can be faded out automatically from the main window, in order to gain more space on the screen. The presentation of the module parameters has been adjusted as well.

Programming system for S7-PLC-controls

In order to program the Siemens PLC-control series S7-300® and S7-400® efficiently and comfortably, IBHsoftec provides the software S7 for Windows®. This software can be combined with S5 for Windows® or runs stand alone. With S7 for Windows® the entire SIMATIC® S7-300® and S7-400® PLC-control series can be programmed. The complete S7 instruction set is implemented in the presentations Statement List (STL), Function Block Diagram (FBD) and Ladder Diagram (LAD).

Oscilloscope

With the Oscilloscope feature the diagnostic capabilities of the programming system are further enhanced. Dynamic processes can be monitored and analyzed in an integrated screen, in look and feel adapted from an oscilloscope front panel. Pointing to I/O signals with a virtual test probe is sufficient for monitoring multiple signals inside the virtual oscilloscope. Signal recording can be stopped at any time for further timing investigation of the machine fault. Besides watching I/O signals, also the state of local variables at a defined position of program execution can be watched, by simply pointing to the variable with the test probe in block status. Only the integration into the programming system S7 for Windows® makes this possible. The recorded data can also be saved for later investigation, for archiving purposes or to send the information via e-mail.
Hardware configuration

The hardware configuration allows the parametrization of modules, the allocation of addresses and the configuration of a PROFIBUS. By clicking on the module in the configuration, a dialogue opens, which allows to setup the module parameters. In the detail window of the module or CPU, executed changes are marked clearly, in order to avoid unintentional changes before saving.

Besides the original Siemens PROFIBUS components, our hardware catalogue contains PROFIBUS components from other manufacturers, which are compatible to Siemens. The hardware catalogue can be extended with files in GSD-format. The hardware configuration of existing STEP®7 projects can be read and edited. Besides offline-creation of hardware configurations, it is also possible to read and edit existing configurations from a PLC. For quick debugging, module diagnostic functions are integrated. The hardware catalogue is updated constantly for the latest modules. These updates are freely available via internet.
Program test during online operations

With S7 for Windows® the entire S7 instruction set can be shown in the representation STL (Statement List) in status view. The status operation is also possible in the representations Function Block Diagram (FBD) and Ladder Diagram (LAD). Furthermore, variable views and symbolic tables are integrated in the status window. All installed interfaces capable of connecting to a PLC are displayed in the online view.

during debugging and returns the reason for the stop in plain text. In contrast to conventional diagnostic tools, no special adaptation of the PLC program is necessary.

Other improvements

All STEP®7-projects can be edited directly without im-/export. Archived STEP®7-projects can be opened directly. All write accesses on the PLC can be prevented with a password protection. Signals (operands) traceability is possible. Cross-reference over complete IO modules and hardware or module diagnostics are also possible. The print preview and the forcing of operands are implemented as well. The conversion from S5- to S7-programs has been optimized. Saving of complete S7-projects on a memory-card is also possible (CPU dependent).

Integrated S7-Simulation, BlockDiff and automatic troubleshooting

S7 for Windows® contains S7-Simulation and the comfortable block comparison (BlockDiff). The functions for an automated troubleshooting are integrated as well. The S7 for Windows® allows a fully automated debugging in the running PLC program. Compared to the classical debugging, the S7 for Windows® performs all the tasks required
**S5 for Windows®**

**Programming system for S5 PLC controls**

*S5 for Windows®* provides the tools for creating, modifying, testing and documenting programs for programmable logic controllers (PLC). *S5 for Windows®* is designed for programming the Siemens PLC family SIMATIC® S5 with STEP®5. The Function Block Diagram (FBD), the Ladder Diagram (LAD), Statementlist (STL) and Graphical Step Sequence (*G5 for Windows®, Graph5®, Graph5/II®*) are used as presentations for S5. Existing S5 programs can be edited directly without im-/export. *S5 for Windows®* is compatible to the original Siemens programming unit. The functions for automatic troubleshooting of *S7 for Windows* are also integrated in *S5 for Windows*.

Create and correct

A comfortable editor to create and edit symbolic tables is integrated. Searching and replacing for any criteria as well as rewiring are possible. A syntax check is integrated. The new comfortable multiple segment editor for the creation of statement lists, function block diagrams and ladder diagrams allow the representation of complex functions too. Focus was set on the easy use with the mouse and/or the keyboard. Cross references and/or the corresponding symbol files are shown with the correct addresses. In this window the symbol file can be edited simultaneously. The allocation of new addresses with syntax check is integrated. Statement lists are created with the comfort of the integrated editor. The assignment of new addresses with syntax check is integrated. The Windows® clipboard can be used for program or configuration manipulations in any place. Statement lists can be altered into function block or ladder diagrams, as far as they are displayable. The display of Function Block Diagrams and Ladder Diagrams in form of Statement Lists is always possible.

Program test during online operations

With *S5 for Windows®* multiple segments can be shown in the status display representations statement list, function block diagram and ladder diagram. The CPU status function provides information about interrupt stack, block stack and system data.

Calling the COM packages

*S5 for Windows®* allows calling the COM packages (Windows® 2000 and XP only). Communication to a PLC can be established via an USB adaptor for instance.

Oscilloscope

The Oscilloscope functionalities of *S7 for Windows®* are also integrated in *S5 for Windows®*. 
The **SoftPLC S7-315/S7-416** executes a program in the same manner as a hardware PLC. The advantage of executing a PLC program this way is, that the PLC status can be displayed in real time. Since the **Soft PLC** behaves like a original SIMATIC® PLC, the programming tools **S7 for Windows®** and **STEP®7** can be used. Online connections can be established serial, via Ethernet, via PROFINET DP and directly on the same PC.

Even for project engineering and diagnostics of the **PROFIBUS DP S7 for Windows®** or the original **STEP®7** tool can be used. The program of a S7-PLC or a Siemens Win AC® SoftPLC including PROFINET DP configuration can be transferred to the **SoftPLC S7-315/S7-416**.

**Operating systems**

To meet the demands of our customers and provide flexibility, a variety of hardware and software platforms are available that are supported by the **SoftPLC**. The S7 version can be installed on systems using Windows® 2000/XP XP Embedded, Vista and Win 7. For OEM applications, also a Windows® CE version is available for almost every CPU architecture.

**SoftPLC I/Os**

The **SoftPLC** can access standard I/O boards as well as numerous intelligent hardware boards available to control bus systems widely used in the industry. Also a driver for Modbus TCP is included. Modbus TCP is used by companies like Wago and Phoenix Contact. PROFINET IOs, as well as a wide range of nodes for other bus systems can be used.

**Supported Fieldbussystems**

<table>
<thead>
<tr>
<th>Fieldbus/-system</th>
<th>Hilscher</th>
<th>Beckhoff</th>
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<tr>
<td>MP-Bus</td>
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</tr>
</tbody>
</table>

**SoftPLC S5-943 / S5-945**

The **SoftPLC** is also available as S5 version. Since the **SoftPLC** behaves like a original SIMATIC® PLC, the programming tools **S5 for Windows®** and **STEP®5** can be used. Access to the field bus can be made with the Hilscher-CIF cards over PROFINET-DP, INTERBUS, AS-I Bus, Device-NET and CAN.

With a TwinCAT I/O driver it is possible to use any Beckhoff field bus master.
The configuration of the fieldbus is very comfortable:

Signal state watching and modification of the I/Os is simplified by the integrated IO monitor:

**Online-Functions**

Direct Online Access with **S7 for Windows® or STEP®7**. Data exchange with the SoftPLC can be established with **S7 for Windows® or Siemens STEP®7**. If the programming system is installed on the same PC, the SoftPLC can be reached directly. All necessary drivers are included. Alternatively data exchange can be established via serial interface using a zero-modem cable. Furthermore it is possible to access the SoftPLC via TCP/IP Ethernet using the IBHNet driver. Online functions are also possible using the Siemens ISO on TCP (RFC1006) protocol.

If a Hilscher CIF30/50/60 or CIFX PROFIBUS master card is used, the SoftPLC can be programmed or reached from an operator panel via the connected PROFIBUS, if the drivers are correctly configured.
Accessing S7-SoftPLC over IBHNet with STEP® 7
If the IBHNet driver is installed on the PU, S7-SoftPLC can be programmed via Ethernet. The IBHNet protocol is always active on S7-SoftPLC, this way no configuration is necessary. In the IBHNet station, which is configured on the programming unit, only the IP-address of the computer, which is executing S7-SoftPLC, needs to be entered.

Accessing S7-SoftPLC over TCP/IP with STEP® 7
In the hardware configuration of the SIMATIC® Manager a CP has to be added to the hardware configuration. In the IP-address-field of the CP, the IP address of the computer with S7-SoftPLC must be set.

Accessing S7-SoftPLC over PROFIBUS® with STEP® 7
In the same manner as it is with a hardware PLC the PROFIBUS needs to be configured first. In the case of S7-SoftPLC this can happen directly, serial or via TCP/IP. If the PROFIBUS® is operational, it is possible to activate the option „OnlineDP“ in the driver configuration to allow an access to the PLC via PROFIBUS®.

Monitoring, Operating, and Controlling simultaneously from one PC
The SoftPLC allows process monitoring, operation, and control from one hardware unit. The use of the SoftPLC is especially useful if a PC for data collection, process visualization, programming, or any other reason needs to be used anyway. A SoftPLC solution eliminates the need for a hardware PLC and the corresponding communication processor.

Access with IBH OPC Server/IBHNet/ RFC1006/DLL/Modbus TCP Server
The S7 SoftPLC has an integrated Modbus TCP-Server, which is supported by numerous visualization software suppliers.

PLC – PLC communication
A data exchange between several PLC controls via Ethernet is possible. The SoftPLC contains a communications processor, which is compatible to the Siemens CP343/CP443. Send/Receive connections between two SoftPLCs, between SoftPLC and for example Siemens PLCs can be realized. The configuration is made using the STEP® 7 tool NetPro®. The following protocols are supported:
• ISO on TCP PU channel (PU, ProTool, WinCC, compatible OPC Server etc.)
• ISO on TCP Send/Receive passive
• ISO on TCP Send/Receive active
• ISO on TCP Fetch/Write passive
• TCP Send/Receive passive
• TCP Send/Receive active
• TCP Fetch/Write passive
• UDP Send/Receive

Additional Functions
The PC environment offers additional functions, which go beyond the usual S7 instructions. So own functions blocks, programmed in C++ can be integrated. This gives the possibility to program hardware drivers for customized I/O without large development.
The communication between the **IBH OPC Server** and the Siemens PLCs can be established via:

- **S5-AS511**
- **S5-TCP/IP**
- **IBH S5 SoftPLC**
- **S7-300®/400®** via PROFIBUS/MPI® using a PC Adaptor (serial/USB)
- **IBH S7-CX315/CX317** over RFC1006/IBHNet
- **S7-200®/300®/400®** via **IBH Link**
- **S7-1200®** over **Ethernet**
- **S7-200** via **CP243®**
- **S7-200 PPI®** (serial/USB)
- **IBH S7 SoftPLC**
- **S7-TCP/IP** via **Ethernet**
- The **STEP®7-Online Interface (SIMATIC NET)** can also be used
- With an optional driver it is possible to communicate via S5-H1 and S7-H1.

Routing functions to PLCs in subnets are also supported.

---

**Connection between visualization and SIMATIC® PLC**

With the **IBH OPC Server** a visualization application can be linked with a SIMATIC® PLC S5, S7-200®, S7-300® and S7-400® or an IBHsoftec **SoftPLC**. Also a mixed operation is possible.

Access to the variables of a PLC Control via OPC. The symbolic addressing used within the PLC program and the Data Blocks can directly be used within the HMI. With a few mouse clicks all or only the desired variables from the PLC can be selected.

The following file formats are supported:

- **S5 for Windows®**
- **S7 for Windows®**
- **STEP®5** and **STEP®7**.

The symbolic addressing used within the PLC program and the Data Blocks can directly be used within the HMI.
The S7-PCI315 executes a program in the same manner as a Siemens PLC. The advantage of executing a PLC program this way is, that the PLC status can be displayed in real time. Since the S7-PCI315 behaves like a original SIMATIC® PLC, the programming tools S7 for Windows® and STEP®7 can be used. Even for project engineering and diagnostics of the PROFIBUS DP, S7 for Windows® or the original STEP®7 tool can be used. The program of a S7-PLC or a Siemens Win AC® SoftPLC including PROFIBUS DP configuration can be transferred to the S7-PCI315.

- S7 for Windows (KIT-Version) included
- STEP®7 compatible
- PROFIBUS-DP-Master
- PCI Card
- Stand alone operation with external power supply
- PU functions with STEP®7 or S7 for Windows® via PROFIBUS-DP, USB, Ethernet or directly
- Operator panels (OPs) and PU devices can be connected in the usual way to PROFIBUS-DP
- HMI applications can connect via PROFIBUS-DP, USB, Ethernet or directly
- HMI applications can connect via the optional IBH OPC Server
- Proven a thousand times, any PROFIBUS-DP module can be used

RAM: 256 KB
Load memory: 256 KB
Retain memory: all data
Processing time: 0.2µs/Instr.

**PCI Add On Card with S7 Compact PLC and programming tool**

RAM: 256 KB
Load memory: 256 KB
Retain memory: all data
Processing time: 0.2µs/Instr.
The PLC, that connects two worlds

The Powerful S7-CX317 and the Low-Price S7-CX315 are S7 compatible PLCs based on Beckhoff hardware.

For the S7-CX a free programming tool is included.

Since the S7-CX series behaves like a original SIMATIC® PLC, the programming tools S7 for Windows® and STEP®7 can be used. Online connections can be established via Ethernet. The S7-CX executes a program in the same manner as a hardware PLC. The program of a S7-PLC can be transferred to the S7-CX series.

As hardware platform for the S7-CX, the modular DIN rail PCs of the CX series of the Beckhoff Automation GmbH is used. The fieldbus used to control the central and the distributed IO primarily is EtherCAT (Real-Time Ethernet).

Technical data:

RAM:
- IBH S7-CX315: 256 KB
- IBH S7-CX317: 16 MB

Load memory:
- IBH S7-CX315: 256 KB
- IBH S7-CX317: 4 MB

Retain memory:
- IBH S7-CX315: 64 KB
- IBH S7-CX317: 64 KB

Processing time:
- IBH S7-CX315: 0,20 µs / Instr.
- IBH S7-CX317: 0,075 µs / Instr.

Dimensions:
- IBH S7-CX315: 59 mm x 100 mm x 91 mm
- IBH S7-CX317: 59 mm x 100 mm x 91 mm

Internal Bus system of the CPU:
- EtherCAT (E-Bus)
  - PU functions with STEP®7 or S7 for Windows® over Ethernet with the ISO on TCP (RFC1006) or the IBH Link protocol.
  - Online connections via PROFIBUS DP are possible with the Beckhoff PROFIBUS Master EL731. Operator panels (OPs) and PU devices can be connected in the usual way to PROFIBUS DP.
  - HMI applications can connect via ISO on TCP (RFC1006), the IBH Link protocol or via the optional IBH OPC Server for the visualization PC.
  - Diagnostics and HMI via Intranet/Internet with the integrated web server.
  - PLC to PLC communication via the integrated Ethernet CP.
  - Based on the reliable and flexible Beckhoff hardware.

- In conjunction with the Beckhoff TwinSAFE modules, safety functions (i.e. emergency stop) can be realized very easily and cost-effective with the S7-CX315 and S7-CX317.
- Using the EtherCAT technology, it is possible to integrate other fieldbus segments, as for instance PROFIBUS DP, CANopen, AS-i, DeviceNet, ControlNet, Modbus, Fipio, CC-Link, EtherNet/IP, and SERCOS interface at any place of the EtherCAT network.
- For the operation in building automation, the bus systems LON, EIB, MP, as well as DALI are available.
- Special functions for the peripheral devices (ADS functions) can be called via integrated function blocks.

S7-CX315/S7-CX317

Data exchange with the S7-CX PLC can be established with S7 for Windows® or the Siemens SIMATIC® manager. Furthermore it is possible to access the IBHsoftec S7-CX PLC via TCP/IP Ethernet using the IBHNet driver.

Online functions are also possible using the Siemens ISO on TCP (RFC1006) protocol (a standard protocol within STEP®7 and S7 for Windows®).
**PLC – PLC communication:**

A data exchange between several PLCs via Ethernet is possible.

The IBHsoftec **S7-CX** series contains a communications processor, which is compatible to the Siemens CP343. Send/Receive connections between two **S7-CX** controllers, in addition, between **S7-CX** controllers and for example Siemens PLCs or a IBHsoftec **SoftPLC**, which runs on a PC, can be realized. The configuration is made using the STEP® tool NetPro®.

The following protocols are supported:

- ISO on TCP PU channel (PU, ProTool, WinCC®, compatible OPC server etc.)
- ISO on TCP Send/Receive passive
- ISO on TCP Send/Receive active
- ISO on TCP Fetch/Write passive
- TCP Send/Receive passive
- TCP Send/Receive active
- TCP Fetch/Write passive
- UDP Send/Receive

The **S7-CX** PLCs unite the worlds of industrial PC and hardware PLC and fulfills the criteria for Programmable Automation Controller. Depending on the task, the components of the modular control system can be plugged together and be built like a PLC into the switch cabinet or terminal box. The S7-compatible **S7-CX** controllers support the Beckhoff fieldbus terminals and also the EtherCAT terminals via the appropriate IO interfaces as IO system. This offers the opportunity to use the entire range of the open and fieldbus-neutral Beckhoff IO system.

The **S7-CX PLC** will be supplied preconfigured, so it is immediately ready to use.

With the Beckhoff System Configurator, the variety of the Beckhoff I/O terminal modules can be configured.

The user takes benefit from a flexible automation system and can take advantage of the wide-spread S7-programming tool.
IBH Link S7++ / IBH Link S7 Plus /
IBH Link S5++

IBH Link S7++

If a S7 200®, S7 300® or S7 400® has to be connected with a PC via Ethernet, the normal way is to take a CP / Communication processor. IBHsoftec has a more flexible solution:

If you want to connect your PC via Ethernet just take the IBH Link S7++. It is possible to connect the IBH Link S7++ with a hub or switch or via a Crossover cable directly with your PC network card. The used protocol is standard TCP/IP, so you can control your system using VPN or a router. Of course, you can also use an Internet connection.

With the IBH Link S7++ online functions are possible via Profibus DP with up to 12 Mbit/s or via PPI/MPI®. The IBH Link S7++ will reduce your costs because there is no need for the CP’s from Siemens nor the software Simatic Net is required.

The driver for SIMATIC MicroWin®, STEP™7, WinCC, ProTool and, of course, S7 for Windows® is supplied on CD with your IBH Link S7++. Also you can use the IBH OPC Server to connect your visualisation on the PLC via IBH Link S7++. The IBHNet driver enables you to gain direct variable access via standard programming languages like Visual Basic or Delphi. The configuration of the adapter is very easy and normally done in a few minutes. The IBH Link S7++ automatically detects, whether it’s connected to a 10 or 100Mbit/s network. The IBH Link S7++ takes its power supply from the MPI®/DP interface, if available, otherwise via the integrated 24V connector.

Besides the programming capabilities also an application programming interface for HMI applications is included.

For Windows operating systems there are samples in the languages Visual Basic®, Visual C®, C++®, VB.net®, C#, Delphi®, Java®, Excel® included. For Linux there are also samples included.

HMI applications can also connect via ISO on TCP (RFC1006).
- 16 PC-connections at the same time
- 32 MPI® / DP-connections at the same time
- Automatic Baud-rate-detection
- RFC1006
- RJ45-plug with autodetect integrated
- PG(PU) connector
- Diagnostic LEDs
- Power supply from the MPI® / DP interface
- Connection also to passive nodes with power supply via integrated 24V connector

IBH Link S7 Plus

The IBH Link S7 Plus has a rail mount.

IBH Link S5++

Cost-efficient alternative solution for conventional PLC-PC-connections via Ethernet

If a PLC has to be connected via Ethernet with a PC, usually a CP communication processor needs to be applied to the PLCs rack.

In general, the communication processors (e.g. CPs from Siemens, or Ethernet components from other manufacturers) are used for the connection to the PLC.

As an alternative solution, IBHsoftec has recently introduced the IBH Link S5++ for connecting a PLC with a PC. The IBH Link S5++ is a compact and robust Ethernet-converter within a 15-pin Sub-D-housing for a connection via a switch, a hub or even directly to a PC with a common network adaptor.

All required drivers for the STEP® 5 V7.16 or higher and for S5 for Windows® are included. Furthermore the protocols Fetch/Write TCP and RFC1006 passive are supported.

Since many new S7 HMI panels do not support the S5 anymore, the IBH Link S5++ talks the S7 RFC1006 protocol in order to connect this new devices to S5.
S5/S7 Interfaces

**USB-S7-Adaptor MPI®, DP, PPI**

The USB-S7-Adaptor MPI®, DP, PPI is an USB interface to the MPI®/PPI or DP-Bus converter for programming software or HMI. The USB-S7-Adaptor MPI®, DP, PPI has a 1.2m long MPI® connecting cable, which can be directly plugged into the programming socket of the CPU or any other node in the MPI® network. The housing of the USB-S7-Adaptor MPI®, DP, PPI contains a type “B” USB socket. The Adaptor can be connected to the PC via the USB cable supplied. The USB-S7-Adaptor MPI® is powered from the PC. The USB-S7-Adaptor MPI®, DP, PPI can be used at any node of the MPI® bus. A driver for Windows® 98/2000/XP is supplied.

**USB-S7-Adaptor (Siemens) MPI®, DP, PPI**

The USB-S7-Adaptor (Siemens) MPI®, DP, PPI is an USB interface to the MPI®/PPI or DP-Bus converter for programming software or HMI. The USB-S7-Adaptor (Siemens) MPI®, DP, PPI has a 1.2m long MPI® connecting cable, which can be directly plugged into the programming socket of the CPU or any other node in the MPI® network. The housing of the USB-S7-Adaptor (Siemens) MPI®, DP, PPI contains a type “B” USB socket. The Adaptor can be connected to the PC via the USB cable supplied. The required power supply is normally taken from the S7-300® or S7-400® PLCs programming port. The USB-S7-Adaptor (Siemens) MPI®, DP, PPI can be used at any node of the MPI® bus. A driver for Windows 98/2000/XP and Vista is supplied.

**IBH USB-S5-Adaptor**

Interfaces the PC USB Port with the 15 pin AS511 Interface port of the PLC. The 15 pin connector housing is made from solid metal and contains the complete electronics. The IBH USB-S5-Adaptor takes its power supply from the USB port of the PC. It is an active cable, no power supply from the PLCs programming port is required. A Constant Current Adaptor is required to establish a connection. Two constant current (20mA) sources are located in the solid metal 15 pin Sub.-D connector shell to supply the loop current. The adapter is delivered with a AC/DC adaptor. The pin assignment matches the pin assignment of the IBH S5-Current Loop Converter.

**IBH S5-Current Loop Converter**

The SMD electronics are located in a solid metal 15 pin Sub-D connector shell. The pin assignment fits the following SIMATIC® PLCs: 90U, 95U, 100U, 101U, 115U, 135U, and 155U. The PLC must be active and needs to supply the the loop current (2 x 20mA). The 9 pin Sub-D connector is plugged into the serial port (COM1 – COM4) of the PC.

**Constant Current Adaptor for the IBH S5-Current Loop Converter**

For PLCs, that are not supplying the loop current (2 x 20mA), the Constant Current Adaptor is required to establish a connection. Two constant current (20mA) sources are located in the solid metal 15 pin Sub.-D connector shell to supply the loop current. The adapter is delivered with a AC/DC adaptor. The pin assignment matches the pin assignment of the IBH S5-Current Loop Converter.

**USB S5/S7 Prommer (Siemens)**

The USB S5/S7 Prommer is used to program S5 Eproms, S5 EEPROMs, S5/S7 Flash Eproms and S7 MicroMemoryCards.

The USB S5/S7 Prommer is connected via the USB port of the PC.

All Eprom functions such as erasing, displaying, reading, transferring, comparing, and erase check are available.

The USB S5/S7 Prommer works together with S5/S7 for Windows®, STEP®5 and STEP®7

**EPROM-Eraser LG07**

The robust design of this EPROM-Eraser LG07 will withstand even the hardest use. The EPROM-Eraser LG07 has an integrated timer (max. 60 min.) and an indicator to control the erasing procedure. The high power ultraviolet ray lamp has a long life. The ultraviolet ray lamp is turned off if the drawer is opened accidentally. The drawer has roller bearings for easy sliding. Drawer size: 60x90x21mm. The drawer has space for one (1) S5 Eprom Module or up to seven DIP 28 Eprom’s. A 230V / 50/60 Hz 12VA power supply is integrated.
<table>
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<td>IS Systems Pty Limited</td>
<td>Tomato NSW 2322</td>
<td>+61 2 4964 8548</td>
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<td>Austria</td>
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<td>3322 Viehdorf</td>
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<td>Brasil</td>
<td>Orkan Informática</td>
<td>09728 Sao Bernado</td>
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<td>+45 4343 9929</td>
<td>+45 4343 8829</td>
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<td>Mas Trading</td>
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<td>Klinkmann Automation</td>
<td>00371 Helsinki</td>
<td>+35 84 9540 4940</td>
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<td>Pantek Automation SA</td>
<td>77700 Martine La Vallery</td>
<td>+33 16 463 4028</td>
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<td>Lancashire FYB 7LD</td>
<td>+44 125 389 2158</td>
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<td>AD-DA kft</td>
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<td>Hilscher</td>
<td>110025 New-Delhi</td>
<td>+91 1140515640</td>
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<td>+353 1 4419187</td>
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<td>Italy</td>
<td>ICon GmbH s.r.l.</td>
<td>39040 Vahn</td>
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<td>Intotest Sdn Bhd</td>
<td>75460 Melaka</td>
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<td>1802 KC Alkmaar</td>
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<td>Horizon Technology Ltd</td>
<td>North Harbour, Auckland</td>
<td>+64 9 914 0036</td>
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<td>Norway</td>
<td>Autic system A/S</td>
<td>3110 Tonsberg</td>
<td>+47 333 009 50</td>
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<td>53-125 Wroclaw</td>
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<td>Russia</td>
<td>Giesbrecht Technology</td>
<td>Sankt Petersburg</td>
<td>+7 91 259 104 067</td>
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<td>FCC s.r.o.</td>
<td>811 04 Bratislava</td>
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<td>2000 Maribor</td>
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<td>AN Consult España, S.L.</td>
<td>28831 Mostoles-Madrid</td>
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<tr>
<td>Sri Lanka</td>
<td>IMA Control HAILD</td>
<td>Moratuwa (Colombo)</td>
<td>+94 77 7764875</td>
<td>+94 75 551121</td>
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<td>Sweden</td>
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<td>55321 Jönköping</td>
<td>+46 36 34 6010</td>
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<td>Thailand</td>
<td>P.S Union Progress Co</td>
<td>Laipa, Bangchok 103-30</td>
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<td>Turkey</td>
<td>EMIKON LTD. STI.</td>
<td>34776 Y. Dudullu Istanbul</td>
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<td>24405 Winitsa</td>
<td>+38 04352 216 69</td>
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<tr>
<td>USA</td>
<td>Software Toolbox Inc.</td>
<td>Matthews, NC 28105</td>
<td>+1 704 849 2773</td>
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<td></td>
<td>Trans Tech International</td>
<td>West Harwich, MA</td>
<td>+1 781 665 6827</td>
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