Human/Machine Interfaces
Magelis™ Panels and Industrial PCs

Global selection guide
January 2017
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## Human Machine Interfaces
### Small and Advanced panels
#### Magelis STO & STU, Magelis XBTGH

<table>
<thead>
<tr>
<th>Applications</th>
<th>Display of graphic pages</th>
<th>Display of text messages, graphic objects and synoptic views</th>
<th>Control and configuration of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of terminal</td>
<td>Small panels with touch screen</td>
<td>Small panels with touch screen</td>
<td>Advanced hand-held panels</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Screen</th>
<th>Definition</th>
<th>Type</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>320 x 240 pixels, QVGA</td>
<td>3.5&quot; color TFT LCD</td>
<td>320 x 240 pixels, QVGA</td>
</tr>
<tr>
<td></td>
<td>5.7&quot; color TFT LCD</td>
<td>5.7&quot; color TFT LCD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data entry</th>
<th>Via touch screen</th>
<th>Via touch screen</th>
<th>Via touch screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory capacity</td>
<td>32 MB Flash EPROM</td>
<td>26 MB Flash EPROM</td>
<td>32 MB Flash EPROM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Functions</th>
<th>Maximum number of pages</th>
<th>Representation of variables</th>
<th>Recipes</th>
<th>Alarm tags</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limited by internal Flash EPROM memory capacity</td>
<td>Alphanumeric, bitmap, bargraph, gauge, curves, buttons, LEDs</td>
<td>32 groups of 64 recipes</td>
<td>Yes, with log</td>
</tr>
<tr>
<td></td>
<td>Unlimited</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
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<td>Yes</td>
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<td></td>
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<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Memory capacity</th>
<th>Expansion</th>
<th>Access to the PLC real-time clock</th>
<th>Multimedia I/O</th>
<th>Buzzer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory capacity</td>
<td>–</td>
<td>Access to the PLC real-time clock</td>
<td>–</td>
<td>Yes</td>
</tr>
<tr>
<td>Memory capacity</td>
<td>–</td>
<td></td>
<td>1 audio output</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication</th>
<th>Asynchronous serial link</th>
<th>Downloadable protocols</th>
<th>Printer link</th>
<th>OSB ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RS-232/RS-485</td>
<td>Uni-TE, Modbus and for PLC brands: Mitsubishi, OMRON, Allen-Bradley and Siemens</td>
<td>Type A connector and 1 device type mini-B</td>
<td>1 Ethernet TCP/IP port/TCP/IP port (T)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development software</th>
<th>Operating system</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vijeo Type A connector (on Windows XP Professional and Windows 7 Business 32-bit and 64-bit)</td>
<td>Magelis</td>
<td>HMISTU655, HMISTU655W</td>
</tr>
<tr>
<td>Vijeo XD (on Windows 7 and Windows 8)</td>
<td>Magelis</td>
<td>HMISTU855, HMISTU855W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Page</th>
<th>More technical information on our website: <a href="http://www.schneider-electric.com">www.schneider-electric.com</a></th>
</tr>
</thead>
</table>

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(1) Except for HMIGTW with 4 GB SD memory card.
(2) Only HMISTO7511-215 
(3) Only HMISTO75101
(4) Uni-TE version V2 for Twido controller and TSX Micro Premium platform.
(5) Only HMISTO7531-232 
(6) Version without Emergency stop button.
Human Machine Interfaces
Advanced optimum panels
Magelis GTO

Applications
Display of text messages, graphic objects, and synoptic views
Control and configuration of data

Type of terminal
Advanced optimum panels with touch screen

Screen

<table>
<thead>
<tr>
<th>Definition</th>
<th>320 x 240 pixels, QVGA backlit</th>
<th>800 x 480 pixels, WVGA backlit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>3.5&quot; color TFT LCD</td>
<td>5.7&quot; color TFT LCD</td>
</tr>
<tr>
<td>Data entry</td>
<td>Via touch screen</td>
<td>Via touch screen</td>
</tr>
<tr>
<td>Static function keys</td>
<td>6 function keys (static or dynamic)</td>
<td>8 function keys (static or dynamic)</td>
</tr>
<tr>
<td>Dynamic function keys</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Service keys</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Dynamic alphanumeric keys</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Memory capacity

<table>
<thead>
<tr>
<th>Applications</th>
<th>64/96 MB Flash EPROM (1)</th>
<th>96 MB Flash EPROM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Functions

<table>
<thead>
<tr>
<th>Maximum number of pages</th>
<th>Limited by internal Flash EPROM memory capacity</th>
<th>Limited by capacity of internal Flash EPROM memory or of SD card</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables per page</td>
<td>Unlimited (8000 variables max.)</td>
<td>Limited by capacity of internal Flash EPROM memory or of SD card</td>
</tr>
<tr>
<td>Representation of variables</td>
<td>Alphanumeric, bitmap, bagraph, gauge, tank, tank level indicator, curves, polygon, button, LED</td>
<td>—</td>
</tr>
<tr>
<td>Recipes</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Cursors</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Alarm logs</td>
<td>Yes, with logging</td>
<td>—</td>
</tr>
<tr>
<td>Real-time clock</td>
<td>Built-in</td>
<td>—</td>
</tr>
<tr>
<td>Barcode SD</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Multimedia I/O</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Degree of protection (according to IEC 60529)

IP 65 (IP 67 with addition of a cover)

Communication

<table>
<thead>
<tr>
<th>Asynchronous serial link</th>
<th>RS-232C (COM1) and RS-485 (COM2) except HMIGTO1310: RS-232C/485 (COM1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downloadable protocols</td>
<td>Uni-TE (2) Modbus, Modbus TCP/IP (7) and for PLC brands: Mitsubishi, Omron, Allen-Bradley and Siemens</td>
</tr>
<tr>
<td>Asynchronous serial link</td>
<td>RS-232C (COM1) and RS-485 (COM2) except HMIGTO1310: RS-232C/485 (COM1)</td>
</tr>
<tr>
<td>USB ports</td>
<td>1 type A host connector + 1 type mini-B connector (with GTO2310, GTO2315)</td>
</tr>
<tr>
<td>Buses and networks</td>
<td>Ethernet TCP/IP (10BASE-T/100BASE-TX) (2), Modbus Plus and Fipway via USB gateway (with GTO2310, GTO2315)</td>
</tr>
<tr>
<td>Processor</td>
<td>RS-232C (COM1) serial link (4) and USB port for parallel printer</td>
</tr>
</tbody>
</table>

Development software

Magelis (333 MHz RISC CPU)

Operating system

Magelis (333 MHz RISC CPU)

References

HMIGTO1300
HMIGTO1310
HMIGTO2300
HMIGTO2310
HMIGTO3510
HMIGTO4310
HMIGTO5310
HMIGTO6310
HMIGTO2315
HMIGTO5315
HMIGTO6315

Page

Please refer to Magelis GTO: Advanced panels catalog on our website www.schneider-electric.com.

(1) Depending on model.
(2) Uni-TE version V2 for Texto controller and TSX Micro PREMIUM platform.
(3) Except HMIGTO1300 and GTO2300 (Modbus Plus and Fipway via USB gateway only).
(4) Except HMIGTO1300 (USB port for parallel printer only).

<more technical information on www.schneider-electric.com>
### Human Machine Interfaces

**Universal panels**

#### Magelis GTU

<table>
<thead>
<tr>
<th>Applications</th>
<th>Display of text messages, graphic objects, and synoptic views</th>
<th>Control and configuration of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of display module</td>
<td>Advanced display</td>
<td></td>
</tr>
</tbody>
</table>

**Screen**

- **Resolution:** 800 x 480 pixels, 262 K colors
- **Color:** 1,280 x 800 pixels, 262 K colors
- **Max. number of variables:** 255
- **Compare:** 1,024 x 768 pixels, 16 M colors

**Data entry**

- **Touch pad:** Yes
- **Keyboard:** Not available
- **Pointing device:** Touch pad

**Functions**

- **Brightness sensor:** Yes
- **Front USB ports:** Yes
- **Wireless Ethernet:** Yes

**Ambient temperature**

- **Range:** 0...60 °C

**Supply voltage**

- **Max. input:** 12...24 V

**Dimensions**

- **Exterior: (W×H×D) (mm):**
  - 269 × 199 × 67
  - 273 × 215 × 67
  - 288 × 241 × 67
  - 298 × 257 × 67
  - 10.59 × 7.83 × 2.64
  - 12.17 × 9.09 × 2.64

**Standards and certifications**

- **Marine certifications:**
  - IECEx/ATEX Zone 2/22, EAC, KC
  - IECEx/ATEX
  - cULus Hazardous Locations ANSI/ISA 12.12.01 and CSA C22.2 No. 213 Class I,
    - IECExATEX Zone 222, EAC, KC

**CPU**

- **Type:** RISC, 1.3 GHz
- **Operating system:** Windows 7 Embedded on 16 GB CFast storage
- **RAM:** 2 GB
- **ROM:** 512 KB

**Memory**

- **Type:** 256 MB/512 KB

**Discrete I/O**

- **Terminal block with 1 speaker + 1 alarm + 1 buzzer output:**

<table>
<thead>
<tr>
<th>Compatible box models</th>
<th>HMIDT542</th>
<th>HMIDT642</th>
<th>HMIDT643</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium and Open box models</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power</th>
<th>12...24 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>230...255 V</td>
</tr>
<tr>
<td>Max. current</td>
<td>10.4 V</td>
</tr>
</tbody>
</table>

**Multimedia I/O**

- **Front USB ports:**
  - 7

**Communication**

- **Ethernet port:**
  - RJ45
  - SubD9 RS-485/RS-422 (COM2)
  - SubD9 RS-232/RS-485/RS-422 (COM1)

<table>
<thead>
<tr>
<th>Protocols</th>
<th>HMIDT542</th>
<th>HMIDT642</th>
<th>HMIDT643</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uni-TE</td>
<td>Open box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protocols</th>
<th>HMIDT542</th>
<th>HMIDT642</th>
<th>HMIDT643</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fieldbus</td>
<td>HMIDT542</td>
<td>HMIDT642</td>
<td>HMIDT643</td>
<td>HMIDT732</td>
</tr>
</tbody>
</table>

**Discrete I/O**

- **Port:**
  - RJ45

**Multi-touch resistive**

- **HMIDT542, HMIDT642, HMIDT732**

<table>
<thead>
<tr>
<th>HMIGSU</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium and Open box models</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

**Smart display**

- **Smart display:**

<table>
<thead>
<tr>
<th>HMIDT732</th>
<th>HMIDT643</th>
<th>HMIDT642</th>
<th>HMIDT643</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

**CPU**

- **Type:** x86, 1.3 GHz
- **Operating system:** Windows 7 Embedded on 16 GB CFast storage
- **RAM:** 2 GB
- **ROM:** 512 KB

<table>
<thead>
<tr>
<th>Protocols</th>
<th>HMIDT542</th>
<th>HMIDT642</th>
<th>HMIDT643</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uni-TE</td>
<td>Open box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protocols</th>
<th>HMIDT542</th>
<th>HMIDT642</th>
<th>HMIDT643</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fieldbus</td>
<td>Home box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

**Discrete I/O**

- **Port:**
  - RJ45

**Multi-touch resistive**

- **HMIDT542, HMIDT642, HMIDT732**

<table>
<thead>
<tr>
<th>HMIGSU</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium and Open box models</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

**Smart display**

- **Smart display:**

<table>
<thead>
<tr>
<th>HMIDT732</th>
<th>HMIDT643</th>
<th>HMIDT642</th>
<th>HMIDT643</th>
<th>HMIDT732</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
<td>Premium box</td>
</tr>
</tbody>
</table>

### Selection guide

**Compatibility display models**

- **HMIDT542, HMIDT642, HMIDT643, HMIDT542, HMIDT642, HMIDT732**

**Box module reference**

- **Please refer to Magelis GTU catalog on our website www.schneider-electric.com.**

### Note

(1) Intelligent Data Service (IDS) of Vijeo Designer is an add-on option.
### Human Machine Interfaces

**Advanced Keypad-Touchscreen panels**

**Magelis GK**

| Applications | Display of text messages, graphic objects and symbotic views
| Control and configuration of data
| Type of terminal | Keypad-Touchscreen panels

| Screen | Color TFT LCD
| Type | 5.7"
| Size | 10.4"
| Resolution | QVGA, 320 x 240 pixels, 65 K colors
| Backlight | Life span > 50,000 hrs @ 25 °C / 77 °F

| Data entry | Display of text messages, graphic objects and symbotic views
| Control and configuration of data
| Static function keys | Via keypad and/or touchscreen (configurable) and/or industrial printer
| Dynamic function keys | 10
| Service keys | 12
| Alphanumeric keys | 12

| Memory capacity | Application
| Expansion | 128 MB Flash EPROM
| 4 GB SD Card

| Functions | Maximum number of pages
| Variables per page | Unlimited (8000 variables max.)
| Representation of variables | Alphanumeric, bitmap, bargraph, gauge, tank, tank level indicator, curves, polygon, button, LED
| Recipes | 32 groups of 64 recipes comprising 1024 ingredients max.
| Curves | Yes, with log
| Annex log | Yes
| Real-time clock | Built-in
| Discrete I/O | –
| Multimedia I/O | –

| Communication | Asyncronous serial links
| RS-232C (COM1) | RS-485 (COM2)
| USB porte | –
| Bus and networks | Modbus Plus, Fipway with USB gateway
| Ethernet TCP/IP (10BASE-T / 100BASE-TX)

| Development software | Vijeo Designer (on Windows XP Professional and Windows 7 Professional 32/64-bit)

| Operating system | Magelis (CPU 333 MHz, RISC)

| References | HMIGK2310

Note: Please refer to Magelis GK Advanced Keypad-Touchscreen panels catalog on our website www.schneider-electric.com.
### Selection guide (continued)

#### Human Machine Interfaces

**Industrial PC and display**

**Magelis HMIP Panel PCs**

<table>
<thead>
<tr>
<th>Type of Magelis IPC</th>
<th>HMIPS Optimized</th>
<th>HMIPSP Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fanless</td>
<td>Panel PC</td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td>Touch screen</td>
<td></td>
</tr>
<tr>
<td>- W19” multi-touch projected capacitive technology screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- W15” multi-touch projected capacitive technology screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>1920 x 1080 x 800 pixels</td>
<td>1920 x 1080 x 800 pixels</td>
</tr>
<tr>
<td>Plant protection</td>
<td>IP 66 front panel, NEMA 4X indoor, and 7H hardness anti-scratch</td>
<td></td>
</tr>
<tr>
<td>CPU</td>
<td>Intel® Atom E3837 dual-core (1.75 GHz)</td>
<td>Intel Core™ i3-4010U dual-core 4 (1.7 GHz)</td>
</tr>
<tr>
<td>Expansion slots</td>
<td>1 optional full-size mini PCIe slot with optional interface slot (1)</td>
<td>1 full-size mini PCIe slot with and optional interface slot</td>
</tr>
<tr>
<td>Storage</td>
<td>CFast card ≥ 16 GB, or SSD flash disk ≥ 90 GB with 2 million hours MTBF (1), or HDD hard disk ≥ 500 GB Enterprise 24/7 (1)</td>
<td>CFast card ≥ 4 GB (SLC technology) or SSD flash disk ≥ 60 GB with 2 million hours MTBF</td>
</tr>
<tr>
<td>RAM</td>
<td>4 GB (not extendable)</td>
<td>2 GB (not extendable)</td>
</tr>
<tr>
<td>Hot-swappable RAID HDD and battery backup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating system</td>
<td>None, or WES 7/Windows 7 Ultimate SP1 (64-bit Multi-language) (2), or WES 8.1/Windows 8.1 Industry (64-bit Multi-language) (3)</td>
<td>None, or WES 7/Windows 8.1 Professional/Windows 7 Ultimate 64-bit Professional</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>24 V (± 20%) AC power supply with external AC/DC power adapter HMIPSPOSMAC1.</td>
<td>24 V (± 20%) AC power supply with external AC/DC power adapter HMIPSPSMAC1.</td>
</tr>
<tr>
<td>Standards and certifications</td>
<td>CE (± 20%); cULus (UL IT 60950, CSA IT 60950)</td>
<td>CE (± 20%); cULus (UL IT 60950, CSA IT 60950)</td>
</tr>
<tr>
<td>Software</td>
<td>Vijeo XD RT Demo to be installed and activated by unlimited license HMIWTCZLPSPAZZ.</td>
<td>Vijeo XD RT Demo to be installed and activated by unlimited license HMIWTCZLPSPAZZ.</td>
</tr>
<tr>
<td>References</td>
<td>HMIPSOe52D1e01/401</td>
<td>HMIPSPa52D1e01/401</td>
</tr>
<tr>
<td>Configured-To-Order</td>
<td>Please refer to Magelis Industrial PC and Display catalog on our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a>.</td>
<td>Please refer to Magelis Industrial PC and Display catalog on our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a>.</td>
</tr>
</tbody>
</table>

(1) With HMIPPOPSO ST1 expansion All for HMIPSPO allowing 7 HOD SSD slot and 7 mini PCIe slot.
(2) Available with HMIPSPO and HMIPPEP Configured-To-Order offer only.

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**Magelis HMIPPEP Enclosed Panel PC**

<table>
<thead>
<tr>
<th>Enclosed PC</th>
<th>Panel PC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>Touch screen</td>
<td>12” single-touch resistive</td>
</tr>
<tr>
<td>- W19” multi-touch projected capacitive technology screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td>1360 x 768 pixels</td>
<td>1360 x 768 pixels</td>
</tr>
<tr>
<td>Plant protection</td>
<td>IP 66 on all 6 faces, NEMA 4X indoor, and 7H hardness anti-scratch</td>
<td>9FSS and Nema 4X indoor front panel protection when mounted on panel or enclosure door</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Core™ i3-4010U dual-core 4 (1.7 GHz)</td>
<td>Intel Core 827E (1.4 GHz)</td>
</tr>
<tr>
<td>Expansion slots</td>
<td>2 optional PCI/PCIe slots with expansion module HMIPPC1</td>
<td>2 optional PCI/PCIe slots with expansion module HMIPPC1</td>
</tr>
<tr>
<td>Storage</td>
<td>CFast card ≥ 4 GB (SLC technology) or SSD flash disk ≥ 60 GB with 2 million hours MTBF</td>
<td>SSD flash disk ≥ 500 GB Enterprise 24/7</td>
</tr>
<tr>
<td>RAM</td>
<td>2 GB (not extendable)</td>
<td>2 GB (user extendable)</td>
</tr>
<tr>
<td>Hot-swappable RAID HDD and battery backup</td>
<td></td>
<td>Optional battery backup</td>
</tr>
<tr>
<td>Operating system</td>
<td>None, or WES 7/Windows 8.1 Industry (64-bit Multi-language) (3)</td>
<td>Windows Embedded Standard 2009 or Windows 7 Ultimate 64-bit Professional</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>24 V (± 20%) AC power supply with external AC/DC power adapter HMIPPSPOSMAC1.</td>
<td>24 V (± 20%) AC power supply with external AC/DC power adapter HMIPPSPOSMAC1.</td>
</tr>
<tr>
<td>Standards and certifications</td>
<td>CE (± 20%); cULus (UL IT 60950, CSA IT 60950)</td>
<td>CE (± 20%); cULus (UL IT 60950, CSA IT 60950)</td>
</tr>
<tr>
<td>Software</td>
<td>Vijeo XD RT Demo to be installed and activated by unlimited license HMIWTCZLPSPAZZ.</td>
<td>Vijeo XD RT Demo to be installed and activated by unlimited license HMIWTCZLPSPAZZ.</td>
</tr>
<tr>
<td>References</td>
<td>HMIPPEP101</td>
<td>HMIPPUH601</td>
</tr>
<tr>
<td>Configured-To-Order</td>
<td>Please refer to Magelis Industrial PC and Display catalog on our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a>.</td>
<td>Please refer to Magelis Industrial PC and Display catalog on our website <a href="http://www.schneider-electric.com">www.schneider-electric.com</a>.</td>
</tr>
</tbody>
</table>

(3) Win 8.1 requires user activation.
### Human Machine Interfaces

#### Industrial PC and display

**Magelis Modular Box PC Magelis**

**HMIBM Modular Box PCs and Modular HMIDM Displays**

<table>
<thead>
<tr>
<th>Type of Magelis IPC</th>
<th>Magelis HMIBM Modular Box PC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Universal</td>
</tr>
</tbody>
</table>

#### Fanless

- Box PC or Panel PC mounting
  - Box PC: HMIBM Box wall/book mounting or Panel PC: HMIBM Box + associated HMIDM Display
- CPU (2)
  - Intel®Celeron® 2956U dual-core (1.6 GHz)
- Expansion slots
  - 2 full-size mini PCIe with 2 optional interface slots
- Storage
  - None or SSD flash disk ≥ 80 GB with 2 million hours MTBF, or SSD hard disk ≥ 500 GB Enterprise 24/7
- RAM
  - 4 GB (not extendable)
- Optional
  - No or SSD flash disk ≥ 80 GB with 2 million hours MTBF, or SSD hard disk ≥ 500 GB Enterprise 24/7
- Operating system
  - None or Configured-To-Order offer
- Conformal coating
  - Yes
- Standards and certifications
  - IPv 66, NEMA 4X indoor, and 7H hardness anti-scratch
- Front USB port
  - Optional
  - No or Configured-To-Order offer
- Front protection
  - Optional
  - No or Configured-To-Order offer

#### References

- Please refer to Magelis Industrial PC and Display catalog on our website [www.schneider-electric.com](http://www.schneider-electric.com).

#### Modular displays for Panel PC mounting

**Magelis HMIDM Modular Display**

- HMIBM Modular Box PC
  - HMIBMU Universal

#### Display

- Type
  - 4.3" 15 single-touch resistive
- Resolution
  - XGA, 1024 × 768 pixels
- Front protection
  - IP 66, NEMA K4x, and F1 hardness anti-scratch
- Front USB port
  - 1 USB 2.0 port

- Standards and certifications
  - CCC
  - RCM
  - EAC
  - CCC
  - EAC

#### Panel PC mounting

- All HMIBM Modular Box PCs are mounted behind the displays

- References
  - Please refer to Magelis Industrial PC and Display catalog on our website [www.schneider-electric.com](http://www.schneider-electric.com).

#### More technical information on [www.schneider-electric.com](http://www.schneider-electric.com)
<table>
<thead>
<tr>
<th>Type of Magelis IPC</th>
<th>Magelis HMIBS S-Box PC</th>
<th>Magelis HMIR Rack PC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HMIBSO Optimized</td>
<td>Rack PC 2U Optimized HMR (3)</td>
</tr>
<tr>
<td></td>
<td>HMIBSU Universal</td>
<td>Rack PC 2U Universal HMRSU (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rack PC 4U Performance HMRSP (3)</td>
</tr>
</tbody>
</table>

**Fanless**

- Yes
- Yes
- No

**CPU (†)**

- Intel Atom N270 (1.6 GHz)
- Intel Atom N2600 (1.6 GHz)
- Intel Core G540 (2.5 GHz)
- Intel Core G850 (2.9 GHz)
- Intel Core i3-2120 (3.3 GHz)
- Intel Xeon™ Quad core E3-1225 (3.1 GHz)

**PCI slot**

- 1 half-size mini PCIe
- 1 full-size mini PCIe
- 2 PCIe (x8) + 1 PCI
- 2 PCIe (x16) + 1 PCI
- Up to 7 slots: 4 PCIe (x16) + 3 PCI

**Storage**

- CFast card
- SSD (1)
- No storage drive or 1 HDD
- 1 HDD
- 1 HDD or 1 SSD
- 1 HDD, 2 HDD RAID, or 1 SSD

**RAM**

- 2 GB DDR3
- 4 GB DDR3
- 4 GB DDR3, 8 GB ECC, or 16 GB DDR3

**Operating system**

- Windows Embedded Standard 2009
- Windows 7 32-bit (WES 7 Premium)
- None
- Windows 7
- Windows 7, or Windows Server 2008 Standard R2, or Windows Server 2012 R2

**Supply voltage**

- 9...36 V
- 12...24 V
- 110...240 V

**Standards and certifications**

- cULus
- EAC
- CCC
- RCM
- iCEA
- ISO 13850
- EN 62479
- ATEX/IECEx
- KC
- CSR

**Software**

- Vijeo Designer RT Demo (21-day trial version). Unlimited license, to be ordered separately (VJDSNRTMPC)
- Vijeo XD RT Demo to be installed and activated by unlimited license HMIRTMCZLSPAZZ
- None or Vijeo Citect DVD for SCADA applications

**Compatibility**

- All PCs with video port

**Reference**

- HMIDID64DTD1
- HMIDID73DTD1
- HMID064DT01

**Display**

- 15" color multi-touch resistive
- XGA, 1024 × 768 pixels
- IPS
- 1 USB 2.0 port
- 12...24 V

**Standards and certifications**

- cULus
- CCC
- ATEX/IECEx
- KC
- IECEx
- ABS
- UL
- CUL
- EN 62479
- IEC 61800-5-1
- IEC 61800-5-2
- EN 50160
- IEC 61499
- CE
- ISO 13850
- ATEX/IECEx

**Reference**

- HMID064DT01

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(1) With 5-year Intel warranty and 2 million hours MTBF
(2) Requires Vijeo Designer V6.2 SP2 or later to build and download HMI application

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**Selection guide (continued)**
Selection guide (continued)

Human Machine Interfaces
HMI controllers
Magelis SCU

Applications

- Display of text messages, graphic objects and mimics, control and configuration of data
- IEC 1131-2 control function
- Small HMI controllers

Small HMI controllers:
- For control of simple machine

Display

- Definition: 65K colors
- Type: 3.5” color TFT LCD, 5.7” color TFT LCD

Data entry

- Via touch screen
- 128 MB Flash EPROM

Memory capacity

- Application: Limited by internal Flash EPROM memory capacity
- Expansion: –

Functions

- Variables per page: Unlimited (8000 variables max.)
- Languages according to IEC 1131-2 (LD, ST, FBD, SFC, IL)
- Counting/positioning: 2 x 100 KHz high speed counter inputs/2 x 50 KHz pulse train outputs
- Control (PID): Yes
- Representation of variables: Alphanumeric, bitmap, bargraph, gauge, tank, tank level indicator, curves, polygon, button, light
- Recipes: 32 groups of 64 recipes comprising 1024 ingredients max.
- Alarm log: Yes, with log
- Real-time clock: Built-in

IO

- Integrated: 14 x 24 V DC digital inputs
- 2 high speed counter (HSC) inputs
- 6 digital relay outputs
- 2 pulse train source transistor outputs

I/O modular expansion

- –

Communication

- Modbus, Modbus TCP/IP (1)
- Asynchronous serial link: RS-232C/RS-485 (COM1)
- Buses and networks: 1 CANopen master
- Ethernet TCP/IP (1): 1 CANopen master
- Ethernet TCP/IP (1): 1 CANopen master
- USB port for parallel printer
- Printer link: USB port for parallel printer

Design software

- SoMachine on Windows XP Professional and Windows 7 Professional 32/64-bit (please refer to our website www.schneider-electric.com).

Operating system

- Magelis (333 MHz RISC CPU)

References

- HMISCU6A5
- HMISCU8A5
- HMISCU6B5
- HMISCU8B5

Pages

- Please refer to Magelis SCU catalog on our website www.schneider-electric.com.

(1) Depending on model.
Human Machine Interfaces
HMI configuration software for HMI terminals

Applications
- Traditional architecture, HMI executed on PC platform or dedicated terminal
- Configuration software for operator dialogue applications

Compatible products
- Magelis® XBTNX/RT Small panels (1)
- Magelis® XBTGT/GK/GH/GTW/GTO Advanced panels and Magelis™ GTU Universal panels (1)
- Magelis™ Industrial PCs

Functions
- Reading/writing of PLC variables
- Display of variables
- Data processing
- Sharing of variables between HMI applications
- Saving of variables to external database

Internationalization
- –

Development of graphic applications
- Native library of graphic objects
- Curves and alarms
- Scripts

Communication between HMI application and PLCs
- Via I/O drivers: Schneider Electric or third party protocols (Mitsubishi,Omron, Rockwell Automation, Siemens)

Uploading of applications
- Yes

Simulation of HMI applications
- Yes

Recipe management
- –

Screen capture
- –

Access security
- Linked to user profiles

Interface languages
- Screens, online help and documentation in electronic format available in 6 languages: English, French, German, Italian, Simplified Chinese and Spanish

OS compatibility

References
- VJXO Designer™ Lite

Vijeo Designer™ Lite
Please refer to Vijeo Designer catalog on our website www.schneider-electric.com.

OS compatibility
- Windows XP Professional, Windows 7 Business (32-bit and 64-bit), Windows 2008 Professional

References
- VJXO Designer

Vijeo Designer™
Please refer to Vijeo XD catalog on our website www.schneider-electric.com.

(1) All Magelis XBT and Magelis GTU/GTO terminals behave transparently on restoration of power.
(2) Depending on compatible product.
Human Machine Interfaces

USB accessories for HMI terminals

USB accessories (programmable with Vijeo Designer)

Monolithic USB tower lights

<table>
<thead>
<tr>
<th>Description</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ 3 multi-color LEDs</td>
<td>XVGU35SWV</td>
</tr>
<tr>
<td>▪ Clear lens</td>
<td>XVGU35SHA</td>
</tr>
<tr>
<td>▪ Siren (up to 85 dB at 1 m/3.28 ft distance)</td>
<td></td>
</tr>
<tr>
<td>▪ Pre-assembled USB cable for easy connection</td>
<td></td>
</tr>
<tr>
<td>▪ USB cable clamp to help ensure firm connection</td>
<td></td>
</tr>
</tbody>
</table>

Degree of protection

IP 54

Dimensions

Ø 60 mm/2.36 in.

Power consumption

2 W

Product certifications

CE, UL, CSA, GOST, and RCM

Type of mounting/cut-out

Mounting on flat surface: M22

Connection

USB cable with type A female connector:

- 300 mm/11.81 in. for tube mounting
- 400 mm/15.75 in. for direct mounting

Compatibility with Magelis

Magelis XBT GT/GC, HMI GK/GTO/GXO/SCU/G3U/G5U (1)

References

XVGU35SWV

XVGU35SHA

Pages

Please refer to USB accessories for HMI terminal catalog on our website www.schneider-electric.com.

Infiltrated USB switch

USB keyboard

Biometric USB switch

<table>
<thead>
<tr>
<th>Description</th>
<th>USB keyboard with 12 keys and integrated LEDs that can be used as user customizable function keys or alphanumeric input keys</th>
<th>Measures access to HMI data via USB port</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ 5 customizable soft/static function keys</td>
<td>▪ USB keyboard with 12 keys and integrated LEDs that can be used as user customizable function keys or alphanumeric input keys</td>
<td>▪ Levels of authorization through fingerprint recognition</td>
</tr>
<tr>
<td>▪ Multi-color LED backlight or alarm acknowledgment</td>
<td>▪ USB keyboard with 12 keys and integrated LEDs that can be used as user customizable function keys or alphanumeric input keys</td>
<td>▪ Traceability of users and operations</td>
</tr>
<tr>
<td>▪ USB cable clamp to help ensure firm connection</td>
<td>▪ USB keyboard with 12 keys and integrated LEDs that can be used as user customizable function keys or alphanumeric input keys</td>
<td>▪ Database management from PC</td>
</tr>
</tbody>
</table>

Degree of protection

IP 66

Dimensions

80 x 87.6 x 31.5 mm/3.15 x 3.43 x 1.24 in. (H x W x D)

Power consumption

2 W or less

Product certifications

UL, CSA, CE and GOST

Type of mounting/cut-out

Mount on flat surface: M22

Connection

USB mini-B cable

Compatibility with Magelis

Magelis Panel PC/Box PC, Magelis XBT GT/GC, HMI GK/GTO/GXO/SCU/G3U/G5U (1)

References

HMIZRA1

HMIZKB1

XBS5SB2L2

Pages

Please refer to USB accessories for HMI terminal catalog on our website www.schneider-electric.com.

(1) Except GT1000 series of Magelis XBT GT

More technical information on www.schneider-electric.com
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