GENERAL

AIP831 is the Operation keyboard for eight-loop simultaneous operation for CENTUM VP's desktop type HIS. The AIP831 is equipped with 8-loop control keys which contains touch sensors for sensing being touched. (The touch sensors are used for "Instrument faceplate highlight" function of the desktop type HIS.) The AIP831 buzzes alarms (electronic buzzers) and contains an independent USB speaker (a sound function).

A license of VP6H1140 Eight-loop simultaneous operation package (for AIP831) is required when using the AIP831 on the Desktop type HIS, which is an optional function to the Standard Operation and Monitoring Function (VP6H1100).

SOFTWARE REQUIREMENTS FOR AIP831 AND VP6H1140

- CENTUM VP’s standard operation and monitoring function (VP6H1100) is required.
- Only one AIP831 keyboard can be used per the desktop type HIS.

STANDARD SPECIFICATIONS

For installation specifications and operating environment, which are common to the CENTUM VP system, refer to the General Specifications of "Integrated Production Control System CENTUM VP System Overview" (GS 33J01A10-01EN).

- Type: Flat keyboard
- Sound function: USB speaker
- Computer interface
  - Interface connector: USB A type x2 (*1)
  - Conform standards
    - Operation keyboard function: USB 2.0 (Full-speed, Bus-powered)
    - Sound Function: USB 1.1 (Full-speed, Bus-powered)
- Input Voltage: 5 V ± 5% (Supplied from an USB Port of a computer)
- Consumption current: Max. 1 A
- Weight: Approx. 2.0 kg (without VESA Bracket), Approx. 2.5 kg (with VESA Bracket) (*2)
- Chassis Color: Black (Munsell No. N1.5)
- Installation category based on IEC 61010-1: Class I (A device not directly connected with the main power supply).
- Operating environment
  - Ambient temperature: 5 to 40 °C (for normal operation) -20 to 60 °C (in storage and transportation)
  - Ambient humidity: 20 to 80% RH (Non-condensing)
- Touch sensor: Corresponds to a touch by bare hands only.

*1: Both connectors must be connected directly to a computer all the time.
*2: A place for mounting the AIP831 with VESA bracket must withstands the load of at least 10 kg.
The operation keyboard is composed of both alphanumeric keys and special operation keys which are used for controlling processes and monitoring industrial plants.

- **LAYOUT**

![Operation keyboard and names of components](F04E.ai)

- **Mode selection switch (**1)**
- **8-Loop Control keys**
  (Keys with touch sensors are colored in gray)
- **Operation confirmation keys (**2)**
- **Power lamp**
- **Function keys**
- **Plastic cover**
- **Built-in speaker**
  (Electronic buzzer)
- **Cursor move keys (**4)**
- **Display key**
- **Buzzer reset key**
- **Fn key**
- **Data entry keys**
- **Container window key**
- **Ten keys**
- **Clear screen key (**5)**
- **Page up/down keys (**3)**

**1:** Specify by the suffix code to select with or without "Mode selection switch."

**2:** Two types of operation confirmation key symbols are selectable by the suffix codes.

**Type A:**

![Type A](F04E.ai)

**Type B:**

![Type B](F04E.ai)

**3:** These keys also serve as "Volume control keys" when pressed simultaneously with Fn key.

**4:** These keys also serve as "Scroll Keys" when pressed simultaneously with Fn key.

**5:** The clear screen key becomes effective when pressed simultaneously with Fn key.
  (By changing the hardware setting, the clear screen key is enabled without pressing Fn key.)

*Figure Operation keyboard and names of components*
### EXTERNAL DIMENSIONS

#### Keyboard

Note: The above drawings are for the AIP831-1□□ with mode selection switch.

Nominal tolerance:
- Nominal tolerance is ± 0.8 mm for the dimensions of 0.5 mm or more and 120 mm or less, and the combined nominal tolerance is ± 1.5 mm.
- The nominal tolerance is in accordance with JEM 1459 for the dimensions over 120 mm.

#### Dimensions of VESA bracket attachment

Nominal tolerance:
- Nominal tolerance is ± 0.8 mm for the dimensions of 0.5 mm or more and 120 mm or less, and the combined nominal tolerance is ± 1.5 mm.
- The nominal tolerance is in accordance with JEM 1459 for the dimensions over 120 mm.
MODEL AND SUFFIX CODES

Operation Keyboard for Eight-loop Simultaneous Operation

<table>
<thead>
<tr>
<th>Suffix Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0</td>
<td>Without Mode selection switch</td>
</tr>
<tr>
<td>-1</td>
<td>With Mode selection switch</td>
</tr>
<tr>
<td>0</td>
<td>Operation confirmation key Type A</td>
</tr>
<tr>
<td>1</td>
<td>Operation confirmation key Type B</td>
</tr>
</tbody>
</table>

Option Codes
- VESA With VESA Bracket
- EIM With English Instruction Manual
- JIM With Japanese Instruction Manual

Eight-loop Simultaneous Operation Package (for AIP831)

<table>
<thead>
<tr>
<th>Suffix Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-V</td>
<td>Software license</td>
</tr>
<tr>
<td>1</td>
<td>Always 1</td>
</tr>
<tr>
<td>1</td>
<td>English version</td>
</tr>
</tbody>
</table>

APPLICABLE STANDARDS

For the detailed information of the following standards, refer to the General Specifications of “Integrated Production Control System CENTUM VP System Overview” (GS 33K01A10-50E and GS 33K01A20-50E).

Safety Standards
- [CSA] (*1)
- [CE Marking] (*2)
- [EAC Marking] (*6)

EMC Conformity Standards
- [CE Marking] (*2) (*5)
- [RCM] (*3)
- [KC Marking] (*4)
- [EAC Marking] (*6)

- *1: The CSA certification is valid when the AIP831 is connected to a PC indicating the CSA mark.
- *2: The CE marking is effective when the AIP831 is connected to a PC indicating CE mark.
- *3: The RCM certification is valid when the AIP831 is connected to a PC indicating RCM mark indicated.
- *4: The KC marking is effective when the AIP831 is connected to a PC indicating KC Marking.
- *5: EN 61000-3-2 and EN 61000-3-3 of the CE Marking are not applicable to (out of scope of) the AIP831.
- *6: The EAC Marking is valid when the AIP831 is connected to a PC indicating EAC mark.

ORDERING INFORMATION
- Place an order of a license of VP6H1140 per AIP831 keyboard.
- Specify model and suffix codes, and option codes.

TRADEMARKS
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