### SPecification

#### INPUT

**ANALYSIS BOARD (VIBRATION SIGNAL INPUT)**

- Number of input channels: 4 ch
- Maximum number of boards: 6 boards per unit.
- Input voltage range: -25 V to +25 V
  - (Accuracy guaranteed: -20 V to +20 V)
- Input impedance: Approx. 50 kΩ
- Signal input terminal block: FK-MCP 1,5/12-STF-3,81 (Phoenix contact)

#### PHASE MARKER BOARD (PHASE MARKER SIGNAL INPUT)

- Number of input channels: 4 ch
- Maximum number of boards: 2 boards per unit.
- Input voltage range: -25 V to +25 V
- Min. pulse width: 50 μsec
- Triggering: Auto / manual operation
- Input impedance: Approx. 50 kΩ
- Rotation speed range: 60 rpm to 60,000 rpm
- Signal input terminal block: FK-MCP 1,5/12-STF-3,81 (Phoenix contact)

#### OUTPUT

- Transducer power supply: Piezoelectric transducer: +24 VDC/4 mA (constant current)

### SYNCHRONOUS WAVEFORM DATA ACQUISITION

- Spectral resolution: 400/800/1600 line
- Number of samples: 32/64/128 samples per revolution
- Sampling frequency: Up to 51.2 kHz
- Data acquisition interval: 10 sec (minimum)

### ASYNCHRONOUS WAVEFORM DATA ACQUISITION

- Spectral resolution: 400/800/1600 line
- Sampling frequency: Up to 51.2 kHz
- Data acquisition interval: 10 sec (minimum)

#### TREND DATA ACQUISITION

- Data acquisition item (vibration signal input): Please refer to the table below
- Data acquisition item (process signal input): Measurement value

#### Other

- Transient can be measured at a speed up to 15,000 rpm.
- As this input circuit is not single-ended type, isolation between the channels is not provided.
**Specification**

### ANALYSIS MODE

Each analysis board can be set to “Critical” mode or “BOP” mode, depending on the application. Available data varies depending on the mode.

<table>
<thead>
<tr>
<th>Application</th>
<th>Critical mode</th>
<th>BOP mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>For analysis of transient operation of large rotating machinery.</td>
<td>For analysis of rated rotation of plant equipment.</td>
<td></td>
</tr>
</tbody>
</table>

**Phase Marker**

- Required for synchronous sampling of input signal waveform.
- Not required.

**Trend data calculation method**

- Calculated from synchronous waveform.
- Calculated from asynchronous waveform.

**Available trend data**

- Rotor speed
- GAP Amplitude
  - Overall, 0.5X, 1X, 2X, Not-1X, nX1 to nX4
  - $S_{p,\max}$
  - Phase
  - 0.5X, 1X, 2X, nX1 to nX4

**Available waveform data**

- Synchronous waveform
- Asynchronous waveform

### ANALYSIS ACCURACY

- Vibration amplitude and phase accuracy at n times rotation synchronous frequency.
  - $(n = 0.01$ to $10.00 \times 0.01$ increments).

- Vibration amplitude at specified frequency component $(f)$.
  - $(f = 0.01$ to $20,000.00$ Hz in $0.01$ Hz increments).

- Phase mark is available only during displacement vibration measurement.

- Rotor speed is provided only when phase mark input is available.

### SPECIFICATION

**infiSYS ANALYSIS VIEW COMMUNICATION**

<table>
<thead>
<tr>
<th>Network</th>
<th>Ethernet 100Base-TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol</td>
<td>TCP/IP</td>
</tr>
<tr>
<td>I/O connector</td>
<td>RJ-45</td>
</tr>
</tbody>
</table>

**POWER**

- Rated voltage : 24VDC
- Power supply voltage range : 24VDC ±10%
- Input terminal block : Terminal block (M4 screw)

**POWER CONSUMPTION**

- Power consumption : 24W (Max.)

**ENVIRONMENTAL CONDITION**

- Operating temperature : -10°C to +45°C
- Storage temperature : -30°C to +65°C
- Relative humidity : 20% to 90% RH (non-condensing, non-submerged)

**INSULATION RESISTANCE**

- Between power supply and GND : 100 MΩ at 250 VDC

**DIELECTRIC STRENGTH**

- Between power supply and GND : 250 VAC one minute

**DIMENSIONS**

- Approx. 96 (W) x 224 (H) x 163 (D) mm
- (Excluding the projection parts and the mount brackets)

**WEIGHTS**

- At full load : Max. 2.5 kg (5.5lb)

**ADDITIONAL SPECIFICATION CODE / TBB**

<table>
<thead>
<tr>
<th>Code</th>
<th>Accessory</th>
<th>Quantity</th>
<th>Parts Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBB</td>
<td>Signal input terminal block plug (12pin)</td>
<td>6 pieces</td>
<td>(7072NAN)</td>
</tr>
<tr>
<td>FK-MCP 1.5/12-STF-3.81 (PHOENIX CONTACT)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- *15 When placing a separate order for this part, enter the part code above and specify the quantity.

**RELATED SOFTWARE**

- VM-773B infiSYS Analysis View : software to analyze vibration on PC.
- VM-774B infiSYS Remote View : software to analyze vibration on remote PC.

**WARNING**

- Some functions may not be available with old version.
- For details, please refer to "infiSYS Family Improvement Information" (6H16-011).

### Default Value

**INPUT (VIBRATION)**

- Monitoring : Displacement vibration input
- Monitor range : 0 to 100 µm p-p
- Input transducer : FK-202F (non-intrinsic safety)

**INPUT (PHASE MARKER)**

- Input Signal : RD-05A
- Trigger Mode : Manual
- Trigger Level : -18.0V
- Hysteresis : 1.0V

**ALARM**

- OK set point : Enable
- Vibration : Disable
- Phase Marker : Disable

**COMMUNICATION**

- IP Adress : 192.168.8.200
- Subnet mask : 255.255.255.0
- IP Port No. : 8882
### I/O Board Location and Terminal Block (Connector) Pin Assignment

<table>
<thead>
<tr>
<th>Front</th>
<th>Terminal Block (Connector) Pin Assignment</th>
<th>Fitting Plug</th>
<th>Part Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 CH4 SHIELD</td>
<td></td>
<td>7072NAN16</td>
</tr>
<tr>
<td></td>
<td>11 CH4 COM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 CH4 IN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9  CH3 SHIELD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8  CH3 COM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7  CH3 IN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6  CH2 SHIELD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5  CH2 COM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4  CH2 IN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3  CH1 SHIELD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2  CH1 COM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1  CH1 IN</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*16 When placing a separate order for this part, enter the part code above and specify the quantity. With the accessory specification code "7TB", 6 fitting terminal block plugs will be included.

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### System Configuration

**infiSYS View Station**
- Install software VM-773B
- infiSYS Analysis View
- Ethernet 100BASE-TX
- DAQpod DP-2000B infiSYS Data Acquisition Unit
- Monitor output signal(s) (Buffer signal)
- VM-5 or Other monitor(s)
- Sensor, Transducer
- Voltage (1-5V, 0-5V, 0-10V)
- Signal conditioner

**infiSYS Remote Station**
- Install software VM-774B
- infiSYS Remote View
- Ethernet 100BASE-TX
- infiSYS Remote Station
- Ethernet 100BASE-TX
- Sensor, Transducer
- Temperature

Switching HUB

SHINKAWA Sensor Technology, Inc.