iQdata
iQdata is the brand for complete system solutions for all your data centre needs. Thanks to iQdata, SCHÄFER IT-Systems, as an experienced specialist for IT infrastructure, can now offer you the entire product spectrum for the full-scale equipment of your data centre:

- Rack
- Cooling
- Power
- Monitoring
- Security
- Service

iQdata combines the renowned SCHÄFER product quality with innovative and intelligent IT solutions to make your enterprise fit for the future. With unprecedented manufacturing depth, SCHÄFER IT-Systems develops and produces its own data centre solutions and supplies you with the complete system from a single source.

Put your trust in iQdata!

iQdata Monitoring
Due to the constant adjustments and modifications in IT rooms and data centres, monitoring is becoming increasingly important. From monitors at cabinet level with the rack monitoring system (RMS), right up to the presentation of the entire data centre area (DCIM) by means of a modular and scalable platform, iQdata Monitoring provides range of application possibilities.

Always up to date – what do you need to know?

Content

<table>
<thead>
<tr>
<th>I. SCHÄFER IT-Systems</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>They system as a whole</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. iQdata Monitoring</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced availability for your data centre</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rack and Room Monitoring System</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>iQdata RMS 222</td>
<td>8</td>
</tr>
<tr>
<td>iQdata RMS 442</td>
<td>8</td>
</tr>
<tr>
<td>iQdata RMS 842+</td>
<td>9</td>
</tr>
<tr>
<td>iQdata RMS extension unit</td>
<td>9</td>
</tr>
<tr>
<td>iQdata RMS 64DI unit</td>
<td>10</td>
</tr>
<tr>
<td>iQdata RMS dry output</td>
<td>10</td>
</tr>
<tr>
<td>iQdata RMS temp. probe</td>
<td>11</td>
</tr>
<tr>
<td>iQdata RMS humidity probe</td>
<td>11</td>
</tr>
<tr>
<td>iQdata RMS door probe</td>
<td>12</td>
</tr>
<tr>
<td>iQdata leak probe</td>
<td>12</td>
</tr>
<tr>
<td>iQdata RMS leak cable probe</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>iQdata DCIM – Data Center Infrastructure Management</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset management</td>
<td>18</td>
</tr>
<tr>
<td>Cable management</td>
<td>19</td>
</tr>
<tr>
<td>Energy data management</td>
<td>20</td>
</tr>
<tr>
<td>Work Order</td>
<td>21</td>
</tr>
<tr>
<td>Future resource management</td>
<td>22</td>
</tr>
<tr>
<td>Reports</td>
<td>23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Contact</th>
<th>25</th>
</tr>
</thead>
</table>

| IV. SCHÄFER WERKE Group of Companies | 26 |
The analysis is always the first step. In SCHÄFER IT-Systems’ holistic service approach, competent on-site consulting and advice are the decisive components. An energy-efficiency analysis of your data centre determines the status quo and reveals optimization potential.

iQdata

iQdata is the brand for complete system solutions for all your data centre needs. Thanks to iQdata, SCHÄFER IT-Systems, as an experienced specialist for IT infrastructure, can now offer you the entire product spectrum for the full-scale equipment of your data centre:

- Rack
- Cooling
- Power
- Monitoring
- Security
- Service

iQdata combines the renowned SCHÄFER product quality with innovative and intelligent IT solutions to make your enterprise fit for the future. With unprecedented manufacturing depth, SCHÄFER IT-Systems develops and produces its own data centre solutions and supplies you with the complete system from a single source.

Put your trust in iQdata!
Commissioning and acceptance tests are also included in the service portfolio, as is on-site assembly and installation by our own team. And after installation, we continue offering you our support. If your requirements change and your company continues to grow, the modular SCHÄFER IT-Systems solutions will grow with it.

Requirements – what do you need?
Increased availability for Your IT infrastructure

Complete monitoring of the entire data centre
Due to the constant adaptations in IT rooms and data centres, monitoring is becoming increasingly important. From monitors at cabinet level with the rack monitoring system (RMS) up to displaying the entire data centre area (DCIM) by means of a modular and scalable platform, iQdata monitoring offers a wide variety of possible applications.

iQdata Monitoring consists of
- Rack Monitoring System
- Room Monitoring System
- Data Centre Infrastructure Monitoring

The constantly increasing requirements of IT require all relevant parameters to be measured constantly. The RMS system from SCHÄFER IT-Systems meets these challenges. The different device sizes, starting from the RMS 222 up to the RMS 842+, enable rack monitoring to be used individually, adapted to respective sizes and requirements. A wide range of sensors enables the complete recording and evaluation of conditions in the data centres. Threshold and alarm values can be individually adjusted to the requirements of the IT and infrastructure. In this way, alarms and the detection of critical status changes during operation can be displayed.

Whether cabinet or cabinet rows, with the complete RMS from SCHÄFER, you will find the right solution for every size.

The integration of other product areas, such as intelligent power distribution units or electronic door locking systems into the rack monitoring solution is easy. Web-based interfaces allow remote access at any time. A large number of common IT protocols are supported by the systems, so that links to management systems can be made possible whenever required.

The iQdata DCIM from SCHÄFER IT-Systems increases the availability of your data centre. This means that risks can be minimised and your data centre rooms can attain optimal performance. With its attractive and scalable licensing model, the iQdata DCIM is a convincing solution, whether for data centres from 100 m² up to several thousand m² in area. This is how our modular system can grow together with you. Also operation and maintenance of the iQdata DCIM system is fair and transparent.

Your advantages
- Permanent control of all relevant data
- Easy integration of other product areas
- Optimum utilization of your data centre’s capacity
- Increased availability of your IT infrastructure
iQdata RMS 222

Monitoring System to control temperatures, door opening, smoke, leakage and much more. Compatible with all iQdata RMS sensors. With two sensor-free and potential-free inputs and two alarm contacts, the iQdata RMS 222 is the smallest monitoring system for small rooms, IT cabinets or outdoor cabinets. The alarm can be given via various channels, such as SNMP, e-mail, potential-free relays, sirens, and can be freely set like the alarm thresholds.

Dimensions: 33.10 x 139.00 x 79.40 mm (H x W x D)
Weight: 0.5 kg
Material: Housing, 1 mm sheet steel
Colour: RAL 9005
Installation: Stand-alone device
Delivery scope: 1 x RMS 222,
1 x patch cable RJ45 (1 m),
1 x 12 V DC 1 A mains adapter
1 x quick start guide, 1 x connector plug
3.5 mm 3-pin, 1 x MiniUSB to USB cable,
1 x self-adhesive rubber buffers

Features
- Inputs/outputs
  - Analogue sensor inputs: 2 x RJ12 ports
  - Digital inputs: 2 x potential-free inputs
  - Alarm outputs: 2 x 12 V DC max. 0.25 A
- Power supply
  - Power supply: 12 V DC 1 A mains adapter
  - Power consumption: 3-10 Watt
  - Input current: 120 mA
  - External earthing: yes
- Ambient conditions & protection rating
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): 0...60 °C
  - Temperature (in storage): -25...85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing

Dimensions:
33.10 x 139.00 x 79.40 mm (H x W x D)
Weight:
0.5 kg
Material:
Housing, 1 mm sheet steel
Colour:
RAL 9005
Installation:
Stand-alone device
Delivery scope:
1 x RMS 222,
1 x patch cable RJ45 (1 m),
1 x 12 V DC 1 A mains adapter
1 x quick start guide, 1 x connector plug
3.5 mm 3-pin, 1 x MiniUSB to USB cable,
1 x self-adhesive rubber buffers

iQdata RMS 442

Monitoring System to control temperatures, door opening, smoke, leakage and much more. Compatible with all iQdata RMS sensors. With four sensor-free and potential-free inputs and two alarm contacts, the iQdata RMS 442 is the middle-sized monitoring system for small rooms, IT cabinets or outdoor cabinets. It is equipped with a CAN bus and can therefore be extended to up to 128 sensors. The alarm can be given via various channels, such as SNMP, e-mail, potential-free relays, sirens, and can be freely set like the alarm thresholds.

Dimensions: 33.10 x 179.00 x 79.40 mm (H x W x D)
Weight: 0.7 kg
Material: Housing, 1 mm sheet steel
Colour: RAL 9005
Installation: Stand alone or 19” (optional kit must be ordered separately)
Delivery scope: 1 x RMS 442,
1 x patch cable RIAS (1 m),
1 x 12 V DC 1 A mains adapter 1 x quick start guide,
1 x connector plug 3.5 mm 3-pin,
1 x connector plug 3.81 mm 3-pin,
1 x MiniUSB to USB cable, 4 x self-adhesive rubber buffers

Features
- Inputs/outputs
  - Analogue sensor inputs: 4 x RJ12 ports
  - Digital inputs: 4 x potential-free inputs
  - Alarm outputs: 2 x 12 V DC max. 0.25 A
  - CAN Ports: 2 x CAN open ports
    (for CAN sensors or extension units)
- Power supply
  - Power supply: 12 V DC 1 A mains adapter
  - Power consumption: 3-10 Watt
  - Input current: 120 mA
  - External earthing: yes
- Ambient conditions & protection rating
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): 0...60 °C
  - Temperature (in storage): -25...85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing

Dimensions:
33.10 x 179.00 x 79.40 mm (H x W x D)
Weight:
0.7 kg
Material:
Housing, 1 mm sheet steel
Colour:
RAL 9005
Installation:
Stand-alone device
Delivery scope:
1 x RMS 442,
1 x patch cable RJ45 (1 m),
1 x 12 V DC 1 A mains adapter 1 x quick start guide,
1 x connector plug 3.5 mm 3-pin,
1 x connector plug 3.81 mm 3-pin,
1 x MiniUSB to USB cable, 4 x self-adhesive rubber buffers
II. iQdata Monitoring

Rack and Room Monitoring System

iQdata RMS 842+

Monitoring System to control temperatures, door opening, smoke, leakage and much more. Compatible with all iQdata RMS sensors. With eight sensor inputs, 4 + 8 potential-free inputs and two alarm contacts, the iQdata RMS 442 is the largest monitoring system for larger rooms, IT infrastructures, IT or outdoor cabinets. It is equipped with a CAN bus and can therefore be extended to up to 128 sensors. The alarm can be given via various channels, such as SNMP, e-mail, potential-free relays, sirens, and can be freely set like the alarm thresholds.

Dimensions: 44.45 x 440.00 x 79.40 mm (H x W x D)
Weight: 1.2 kg
Material: housing, 1mm steel sheet
Colour: RAL 9005
Installation: stand-alone or 19"

Article name | Order no.
iQdata RMS 842+ | 7808020

Features
- Inputs/outputs
  - Analogue sensor inputs: 8 x RJ12 Ports
  - Digit inputs: 12 x potential-free inputs
  - Alarm outputs: 2 x 12 V DC max. 0.25 A
  - Relay outputs: 2 x relay ports NO/NC
  - CAN Ports: 2 x CAN open ports (for CAN sensors or extension units)
- Power supply
  - Power supply: 90-240 V, IEC C14, 2 A fine wire fuse, power connection via IEC plug
  - Power consumption: 3-10 Watt
  - Input current: 120 mA
  - External earthing: yes
- Ambient conditions & protection rating
  - Maximum height: 0 – 3.000 m
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing

iQdata RMS extension unit

With this module, the number of analogue sensors per RMS to be increased by 8 ports. The module is connected to a free RMS CAN port or a CAN sensor and automatically recognised by the RMS system. The maximum distance on the CAN bus must not exceed 225 metres. Depending on the type, connected sensors can be between 50 and 100 m apart.

Dimensions: 40.00 x 110.00 x 68.00 mm (H x W x D)
Weight: 0.5 kg
Material: housing, 1mm steel sheet
Colour: RAL 9005
Installation: stand-alone or wall-mounted
Delivery scope: 1x extension unit, 1 x 12 V DC 1 A mains adapter, 1 x CAN connector cable, 4 x self-adhesive rubber buffers

Article name | Order no.
iQdata RMS extension unit | 7808100

Features
- Inputs/outputs
  - Analogue sensor inputs: 8 x RJ12 Ports
  - CAN Ports: 2 x CAN open Port for CAN sensors or extension units)
- Power supply
  - Power supply: 12 V DC, 1 A
  - Power consumption: 3-10 Watt
  - Input current: 120 mA
  - External earthing: yes
- Ambient conditions & protection rating
  - Maximum height: 0 – 3.000 m
  - Temperature (in operation): 0...60 °C
  - Temperature (in storage): -25...85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
iQdata RMS 64DI unit

CAN extension unit with 64 digital inputs, enabling the 64 digital statuses to be monitored via network. Each input can be explicitly equipped with its own alarm or an automatic action can be stored, such as switching a 12 V DC alarm output. The CAN bus distance must not exceed 225 m.

**Dimensions:** 40.00 x 215.00 x 40.00 mm (H x W x D) without 19” kit  
**Weight:** 0.6 kg  
**Material:** housing, 1mm steel sheet  
**Colour:** RAL 9005  
**Installation:** wall-mounting, desktop stand alone or 19” mounting  
**Delivery scope:** 1 x 64DI unit, 1 x RJ12 CAN bus cables, 1 x fixing accessories, 1 x 19” kit

### Features

- **Inputs / Outputs**  
  - CAN port: 2 x RJ12 port for connection to the RMS  
  - Digital inputs: 64 for connecting external devices with DO  
- **Power supply**  
  - Power: via CAN  
  - Power consumption: 1 Watt  
  - Eternal earthing: no  
- **Ambient conditions & protection rating**  
  - Maximum height: 0 – 3,000 m  
  - Temperature (in operation): 0...60 °C  
  - Temperature (in storage): -10...85 °C  
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing  
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing

iQdata RMS dry output

This sensor has a potential-free contact which can be switched by the RMS system, if the alarm or warning values are exceeded. This makes it possible to activate external systems and switch on an air circulation cooling device via a digital input in the event of excess temperature. The sensor is mounted on a free 12V DC alarm output on the RMS.

**Dimensions:** 18.00 x 18.00 x 60.00 mm (H x W x D)  
**Weight:** 0.65 kg  
**Material:** PVC housing  
**Colour:** cream white  
**Installation:** universal mounting with screws  
**Delivery scope:** 1x dry output sensor, 1 x 4-wire RJ11 cable (2 m), 1 x 4.8 x 16 mm Screw for mounting, 1x double-sided adhesive tape

### Features

- **Inputs / Outputs**  
  - RJ11 Port: 1 x for connection to RMS  
  - 2-polig: 1 x for connection to an external device with DI  
- **Ambient conditions & protection rating**  
  - Maximum height: 0 – 3,000 m  
  - Temperature (in operation): 0...60 °C  
  - Temperature (in storage): -10...85 °C  
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing  
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
II. iQdata Monitoring

Rack and Room Monitoring System

iQdata RMS temperature probe

Temperature sensor for monitoring critical areas, such as inside technology and server rooms or network racks. It is connected to a free sensor port and recognised automatically by the system.

- **Dimensions**: 18.00 x 18.00 x 60.00 mm (H x W x D)
- **Weight**: 0.5 kg
- **Material**: PVC housing
- **Colour**: cream white
- **Installation**: universal mounting with screws
- **Delivery scope**: 1 x sensor, 1 x 4-wire RJ11 cable (2 m), 1 x fixing accessories

**Article name** | **Order no.**
--- | ---
iQdata RMS temp. probe | 7808200

**Features**
- **Connection**
  - RJ11 Port: 1 x for connecting to the RMS
  - Auto detection: yes
  - Cascadable: no
  - Extendable: up to 100 m
- **Ambient conditions & protection rating**
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): -45...+105 °C
  - Temperature (in storage): -10...+85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
  - Measuring accuracy: ± 0.5 °C
  - Field of application: indoors

iQdata RMS humidity probe

Relative density sensor for monitoring critical areas, such as inside technology and server rooms or network racks. It is connected to a free sensor port and recognised automatically by the system.

- **Dimensions**: 18.00 x 18.00 x 60.00 mm (H x W x D)
- **Weight**: 0.5 kg
- **Material**: PVC housing
- **Colour**: cream white
- **Installation**: universal mounting with screws
- **Delivery scope**: 1 x sensor, 1 x 4-wire RJ11 cable (2 m), 1 x fixing accessories

**Article name** | **Order no.**
--- | ---
iQdata RMS humidity probe | 7808210

**Features**
- **Connection**
  - RJ11 Port: 1 x for connecting to the RMS
  - Auto detection: yes
  - Cascadable: no
  - Extendable: up to 50 m
- **Ambient conditions & protection rating**
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): -10...+80 °C
  - Temperature (in storage): -10...+85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
  - Measuring range: 10 – 95 %
  - Field of application: indoors
iQdata RMS door probe

Reed sensor for monitoring door opening in critical areas, such as server cabinet or access doors. It is connected to a free sensor port on the RMS or an analogue sensor extension unit and detected automatically by the system. Individual sensors can be cascaded up to the maximum permitted distance from the RMS system. For this purpose, another sensor is plugged into the output of the existing sensor.

Dimensions: 18.00 x 18.00 x 60.00 mm (H x W x D)
Weight: 0.8 kg
Material: PVC housing
Colour: cream white
Installation: universal mounting with screws
Delivery scope: 1 x sensor, 1 x 4-wire RJ11 cable (2 m), 1 x mounting bracket, 1 x fixing accessories

Features
- Connection
  - RJ11 Port: 1 x for connecting to the RMS
  - Auto detection: yes
  - Cascadable: no
  - Extendable: up to 50 m
- Ambient conditions & protection rating
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): -10...80 °C
  - Temperature (in storage): -10...85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
  - Measuring accuracy: ± 0.5 °C
  - Measuring range: 10...95 %
  - Field of application: indoors

iQdata RMS leak probe

Sensor for selective monitoring of water leakage in critical areas, such as raised floors. It is connected to a free sensor port on the RMS or a sensor extension unit and detected automatically by the system.

Note: Metal fingers must always be mounted pointing downwards and be as close as possible to the monitored surface without actually touching it.

Dimensions: 18.00 x 18.00 x 60.00 mm (H x W x D)
Weight: 0.6 kg
Material: PVC housing
Colour: cream white
Installation: universal mounting with screws
Delivery scope: 1 x sensor, 1 x mounting bracket, 1 x fixing accessories

Features
- Connection
  - RJ11 Port: 2 m for RMS to RJ11 connection
  - Auto detection: yes
  - Cascadable: no
  - Extendable: up to 100 m from the RMS
- Ambient conditions & protection rating
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): -10...80 °C
  - Temperature (in storage): -10...85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
  - Response time: 1 sec.
  - Reset time: 1 sec.
  - Measuring range: 10...95 %
  - Field of application: indoors
Rack and Room Monitoring System

iQdata RMS leak cable probe

Sensor for area-wide monitoring of water penetration. Measurement is carried out using a 2-wire sensor cable which is not included in the delivery scope. The sensor is connected to a free sensor port and is detected automatically by the system. Different lengths of 2-wire measuring cables are available for this sensor.

- **Dimensions:** 18.00 x 18.00 x 60.00 mm (H x W x D)
- **Weight:** 0.75 kg
- **Material:** PVC housing
- **Colour:** cream white
- **Installation:** universal mounting with screws
- **Delivery scope:** 1 x leak cable probe, 1 x 4-wire RJ11 cable (2 m), 1 x 4.8 x 16 mm screw for fastening, 1 x double-sided adhesive tape

**Features**

- **Inputs/Outputs**
  - RJ11 Port: 1 x for connection to RMS
  - 2-pin: 1 x for terminating a leak cable, 50, 25 or 10 m.
- **Ambient conditions & protection rating**
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): -10...80 °C
  - Temperature (in storage): -10...85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
  - Response time: 1 sec.
  - Reset time: 1 sec.
  - Measuring range: 10...95 %
  - Field of application: indoors

---

iQdata RMS leak cable 50, 25, 10

2-wire water leak cable for connecting to the water sensor 7808240. The cable end is connected to the sensor’s 2-pin connector plug and will then detect various form of liquid media.

- **Dimensions:** 50 m, 25 m, 10 m (length)
- **Weight:** 0.15 kg/m
- **Material:** cable, nickel-plated copper wire; diameter 3 mm; insulation with double glass-fibre sheathing.
- **Colour:** cream white
- **Delivery scope:** 1 x leak cable, 1 x 2-pin connector plug

**Features**

- **Detectable media**
  - Clean water
  - Dirty water
  - Distilled water
  - Acidic solutions
  - Alkaline solutions
- **Ambient conditions & protection rating**
  - Temperature (in operation): -50...105 °C
  - Response time: 7-12 sec.
  - Field of application: liquid media
Smoke/fire detectors for indoor installation for monitoring business-critical areas such as server rooms or offices. All detectors can be connected in series and thus a network of up to 10 detectors can be set up. The sensor is automatically detected by the system. If a fire is detected, the sensor must be reset manually in the WEB GUI.

**Dimensions:** 100 mm Ø, 45mm (H)
**Weight:** 0.29 kg
**Material:** PVC
**Colour:** white
**Installation:** wall-mounting or on angles in 25 mm pitch pattern
**Delivery scope:** 1 x iQdata RMS smoke probe, 1 x RJ11 connector cable 2 m, 1 x mounting bracket, fixing accessories

---

Vibration sensor for detecting vibrations in critical areas. This sensor can used to monitor network cabinets for vibrations that can damage hard drives, or to detect whether a network cabinet has been tampered with. The sensor is connected to a free sensor port on the RMS and then automatically detected by the system. Up to 10 sensors can be connected in series. These will be displayed in the system as one sensor.

**Dimensions:** 18.00 x 18.00 x 60.00 mm (H x W x D)
**Weight:** 0.5 kg
**Material:** PVC housing
**Colour:** cream white
**Installation:** universal mounting with screws
**Delivery scope:** 1 x sensor, 1 x 4-wire RJ11 cable (2 m), 1 x fixing accessories

---

**Article name** | **Order no.**
---|---
iQdata RMS smoke probe | 7808250

**Features**

- **Connection**
  - Sensor connection: 2 x RJ12 ports
  - Max. distance: 150 m from RMS system
  - Cascading: up to 10 in one row (max. 150 m message chain length)

- **Power supply**
  - Via sensor cable

- **Ambient conditions & protection rating**
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): 0...70 °C
  - Temperature (in storage): -25...85 °C
  - Relative humidity (in operation): 5 – 95 % RH, non-condensing
  - Relative humidity (in storage): 5 – 95 % RH, non-condensing

**Features**

- **Connection**
  - RJ11 Port: 1 x for connecting to the RMS
  - Auto detection: yes
  - Cascadable: yes, up to 10 units (will be indicated in the system as sensors)
  - Extendable: up to 100 m
  - Power consumption: 60 mW

- **Ambient conditions & protection rating**
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): 0...60 °C
  - Temperature (in storage): -10...85 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
  - Measuring accuracy: ± 0.5 °C
  - Field of application: indoors
### iQdata RMS IR probe

Passive infrared motion detector for monitoring critical areas of the company. This sensor can monitor your rooms 24/7 for unauthorized access or presence and provide optimal protection for your IT. It is connected to a free sensor port and is automatically detected by the system. Freely adjustable alarm settings allow you to send specific alarms via SNMP or e-mail, for example.

- **Dimensions:** 105 x 57 x 40 mm (H x W x D)
- **Weight:** 0.13 kg
- **Material:** PVC housing
- **Colour:** cream white
- **Installation:** universal mounting with screws

**Features**

- **Connection**
  - RJ11 Port: 1 x for connecting to a free sensor port on the RMS
  - Auto detection: yes
  - Cascadable: no
  - Extendable: max. 50 m
  - Power consumption: 100 mW
  - Angle of detection: 120°
  - Maximum distance: 12 m
  - Status display: LED

- **Ambient conditions & protection rating**
  - Maximum height: 0 – 3,000 m
  - Temperature (in operation): 0...60 °C
  - Temperature (in storage): -10...80 °C
  - Relative humidity (in operation): 5 – 80 % RH, non-condensing
  - Relative humidity (in storage): 5 – 80 % RH, non-condensing
  - Field of application: indoors

### iQdata RMS mounting bracket

Adapter bracket for RMS 442 for mounting in the 19" environment. The Das RMS 442 fastened to the intended support surface with four screws and installed in a free U in the network cabinet.

- **Dimensions:** 44.45 x 440.00 mm (H x W)
- **Weight:** 0.2 kg
- **Material:** 1 mm steel sheet
- **Colour:** RAL 9005

**Installation:** in the 19" profile

**Delivery scope:** 1 x mounting bracket, 1 x mounting accessories for RMS
The intelligent data centre
**One system**
DCIM combines the complex IT and infrastructure requirements into one system. Managing data centres and predicting changes are elementary requirements for a data centre manager.

**All relevant information is collected**
It all begins with the collection of data from the relevant IT and infrastructure components, such as servers, air conditioning or power supply. Here, all systems can be connected to the iQdata DCIM using an IT protocol such as SNMP or an infrastructure protocol such as BACnet. This also includes intelligent Power Distribution Units from the product portfolio of SCHAFER IT-Systems.

**Constant availability is guaranteed**
The iQdata DCIM provides supports in evaluating the changes in the data centre and thus meets the requirements created by its steady growth. The correct conclusions from the readings taken and the transparent evaluation of assets in your own data centre enable proper data centre management. The focus is on constant data centre availability and transparency, minimizing risks and optimizing your data centre in a permanent quality process. This results in significant savings of time and money.

**See DCIM’s performance capability for yourself**
The following options are available:
- Presentation of the iQdata DCIM solutions at your premises
- Presentation of the iQdata DCIM solutions at our premises with a demonstration
- Implementation of a test installation with assistance
- Support during initial installation and in the implementation phase

**Your benefits**
- Complete scalability of the system
- Seamless integration into existing IT infrastructures
- Powerful integrated management system increases energy efficiency
- Improves planning and optimized use of resources
- Provides reliability for auditing and certification in acc. with EN50600
- Realistic presentation of the data centre through visualization

**Contact us to find out more:**
Telephone +49 (0) 2741/283-770 or by mail sales@schaefer-it-systems.de
Managing millions of assets
With iQdata Monitoring, these processes run smoothly, on time and cost-effectively! The asset management functionality is first-class and supports the management of change processes. Practical dashboards provide a quick overview and, of course, ITIL processes are supported. All reliable information and data is collected in a central data pool.

Your benefits
- Easy-to-operate graphic interface
- Graphic documentation of your data centre
- Support for ITIL standards
- User profiles enable multi-client capability
- Extensive device library
- Central, all-encompassing information pool
Cable management

Efficient cable management
As device density increases, so do the requirements for cable management inside and outside data centres and racks. Poor cable management can not only cause damage or increase the time required for modifications, but can also block air distribution. The result is inefficient operation or even system failure. The iQdata Monitoring DCIM module offers the right solution for optimizing your cable management.

Extensive evaluation options, either as predefined reports or convenient ad-hoc evaluation, are possible without any programming knowledge.

Your benefits
- Documentation of the network infrastructure
- Definition of virtual connections
- Schematic or real display
- Calculation of cable lengths
- Visualisation of ports
- Graphic cable patching
- Graphic visualisation of connected devices
Energy costs under control

Energy data management records and collects all relevant data. Any number of measuring points, including the CO₂ output, can be evaluated. Archiving function means old measuring protocols can also be viewed retrospectively. You receive reliable forecasts and EPs. All information is presented in informative charts and dashboards. Comprehensive reports and overview diagrams are also available.

Your benefits

- Monitoring and visualization of all important measurable parameters in the data centre
- Development of meaningful and reliable energy values (PUE, CUE, EUE, DCE)
- Identification of cost drivers
- Electricity consumption Analyses based on the cost-by-cause principle
- Warning messages when limits are exceeded
- Calculation of maximum capacities
- Demand forecast for data centre energy demand
II. **iQdata Monitoring**

**Work order**

**More time for planning and implementation**
Applied to order and IMAC processes, the professional Work Order module allows you to manage any number of work orders and assign them to responsibility, export date, etc. All planning steps are automatically logged, too. The indispensible documentation and checks of available resources are carried out in advance. Transferring work orders to mobile devices is, of course, a component of this module.

**Your benefits**
- Efficient workflow: planning – assigning – confirmation
- Compilation of project-related work orders
- Assignment of staff/scheduling
- Mapping of IMAC processes and workflows
- Documentation of DAMS entries is the basis for the workflow
- Feedback via mobile devices after order execution
Future resource management –
for reliable capacity planning in data centres

Long-term resource planning according to future requirements is a great challenge for those responsible for operating the data centre. This concerns not only the available space, but also the energy requirements and of course the associated cost development. iQdata’s DCIM Future Resource Management module is the very tool that provides the answers to the aforementioned challenge. Each device positioned in iQdata DCIM can be assigned a usage time. This means that devices whose active service does not begin until months later can also be positioned. If the acquisition period is further away, these devices can also be dummy devices that serve purely to generate parameters. The closer the date of deployment is, the more detailed the information about these devices can be and parameters such as manufacturer and model can be provided.

Future resource management allows exact statements to be made about the resource requirements in the data centre, both for the past and for the future. This is guaranteed by the standard functionality of the iQdata DCIM C platform: the continuously integrated timeline. With the time slider, both the past and the future can be displayed graphically. In addition, this data can also be prepared in management-oriented charts and dashboards or as ready-made reports. Infrastructure evaluations show not only the space requirement but also the necessary parameters regarding energy consumption and cooling, as well as the CO₂ emissions generated.
Meaningful reporting and reliable key figures
The iQdata DCIM module “Report” provides you with extensive ready-made reports for all the rather repetitive evaluation scenarios and the required results. The tedious process of gathering figures is replaced by the future-oriented, extremely time-saving retrieval of existing evaluations. In addition, you can, of course, also create your own ad hoc reports in no time at all without any programming knowledge and simultaneously display all information and the relevant links.

Your benefits
■ Important evaluations are pre-defined
■ Integration of customer-specific reports
■ Evaluation of assets, cables, etc.
■ Overview of resource utilization
■ Reports issued atomically via interface at pre-set times
■ Reports can be assigned to users
■ Configuration of charts is possible
Das intelligente Rechenzentrum
Sales management
Thomas Wermke
Sales Director
SCHÄFER Ausstattungssysteme GmbH
Betzdorf plant:
Industriestraße 41 · D-57518 Betzdorf
Phone: +49 (0) 2741/283-781
Fax: +49 (0) 2741/283-798
Mobile: +49 (0) 151/65642035
E-Mail: twermke@schaefer-it-systems.de

Eileen Herden
Sales Assistant
Phone: +49 (0) 2741/283-870
Fax: +49 (0) 2741/283-798
E-Mail: veherden@schaefer-it-systems.de

Sales
Sales Area East
Jörg Krätzig
Area Sales Manager East
Post codes 0, 1, 39, 98-99
Sales office Berlin:
Wendenschloßstr. 462 · D-12557 Berlin
Phone: +49 (0) 2741/283-902
Fax: +49 (0) 2741/283-962
Mobile: +49 (0) 171/5642035
E-Mail: jkraetzig@schaefer-it-systems.de

Sales Area North
Dirk Richter
Area Sales Manager North
Post codes 2, 30-32, 37-38, 49
Sales office Todenbüttel:
Lütjenwestedter Str. 1 · D-24819 Todenbüttel
Phone: +49 (0) 2741/283-908
Fax: +49 (0) 2741/283-968
Mobile: +49 (0) 151/46743756
E-Mail: drichter@schaefer-it-systems.de

Sales Area West North
Michael Jakob
Area Sales Manager West North
Post codes 33, 40-48, 58-59
Sales office Betzdorf:
Industriestraße 41 · 57518 Betzdorf
Phone: +49 (0) 2741/283-835
Fax: +49 (0) 2741/283-798
Mobile: +49 (0) 175/5845251
E-Mail: mjacob@schaefer-it-systems.de

Sales Area South West
Axel Strunk
Area Sales Manager West South
Post codes 33, 40-48, 50-54, 56-59
Key Account Manager Industry
Sales office Betzdorf:
Industriestraße 41 · 57518 Betzdorf
Phone: +49 (0) 2741/283-798
Mobile: +49 (0) 151/52365302
E-Mail: astrunk@schaefer-it-systems.de

Sales Area Middle
Florian Partsch
Area Sales Manager Middle
Post codes 34-36, 55, 60-65
Sales office Büttelborn:
Neustraße 85 · D-64572 Büttelborn
Phone: +49 (0) 2741/283-909
Fax: +49 (0) 2741/283-969
Mobile: +49 (0) 151/5054925
E-Mail: fpartsch@schaefer-it-systems.de

Key account and product management
Thomas Arndt
Key Account Manager IT
Industriestraße 41 · D-57518 Betzdorf
Phone: +49 (0) 2741/283-917
Fax: +49 (0) 2741/283-977
Mobile: +49 (0) 175/4085585
E-Mail: tarndt@schaefer-it-systems.de

Christian Becker
Junior Product Manager
Monitoring and Security
Industrialstraße 41 · D-57518 Betzdorf
Phone: +49 (0) 2741/283-763
Fax: +49 (0) 2741/283-798
E-Mail: cbecker@schaefer-it-systems.de

Matthias Seger
Product Manager Racks and Enclosures
Industrialstraße 41 · D-57518 Betzdorf
Phone: +49 (0) 2741/283-749
Fax: +49 (0) 2741/283-798
Mobile: +49 (0) 171/6481954
E-Mail: mseger@schaefer-it-systems.de

Wolfgang Trepte
Product Manager Rack Cooling
Industrialstraße 41 · D-57518 Betzdorf
Phone: +49 (0) 2741/283-918
Fax: +49 (0) 2741/283-978
Mobile: +49 (0) 151/6564232
E-Mail: wtrepte@schaefer-it-systems.de

Customer service centre
Area West and South
Bernhard Johannes Germann
Sales Manager In-house Products
IT Rack Solutions
Phone: +49 (0) 2741/283-8363
Fax: +49 (0) 2741/283-798
E-Mail: bgemann@schaefer-it-systems.de

Karina Wagner
Sales Manager In-house Products
IT Rack Solutions
Phone: +49 (0) 2741/283-240
Fax: +49 (0) 2741/283-798
E-Mail: kwagner@schaefer-it-systems.de

Verena Neuser
Sales Manager In-house Products
IT Rack Solutions
Phone: +49 (0) 2741/283-730
Fax: +49 (0) 2741/283-798
E-Mail: vneuser@schaefer-it-systems.de

Area North, East, Middle and BeNeLux
Yvonne Henrichs
Sales Manager In-house Products & Service
IT Rack Solutions
Phone: +49 (0) 2741/283-261
Fax: +49 (0) 2741/283-798
E-Mail: yhenrichs@schaefer-it-systems.de

Susanne Weber
Sales Manager In-house Products
IT Rack Solutions
Phone: +49 (0) 2741/283-737
Fax: +49 (0) 2741/283-798
E-Mail: sweber@schaefer-it-systems.de

Jürgen Schmidt
Sales Manager In-house Products
IT Rack Solutions
Phone: +49 (0) 2741/283-776
Fax: +49 (0) 2741/283-798
E-Mail: jschmidt@schaefer-it-systems.de
VI. The SCHÄFER WERKE Group of Companies

EMW Steel Service Centre

SCHÄFER Perforated Metal

SCHÄFER Container Systems

SCHÄFER Container Systems

SCHÄFER IT-Systems

SCHÄFER Industrial Solutions
Within the SCHÄFER Group, SCHÄFER WERKE are the specialists for the development, manufacture and sale of thin steel sheet and stainless steel products. Constant growth and the uncompromising extension of the product range underline the company’s successful strategy. The outstanding success of the five individual business areas lies above all in the ability to put customer wishes into practice quickly, while keeping the products themselves highly individual.

The extraordinary speed at which new sheet steel products can be realised stems from the close co-operation of all business areas with our own EMW Steel Service Centre, which, with a storage capacity of 100,000 t of thin steel sheet, can provide the coils, slit strips, cut-to-size sheets and formats required for further processing in very high quality and at very short notice.

SCHÄFER Perforated Metal supply a broad and rapidly available range of high-quality perforated plates and sheets for all sectors and application fields. SCHÄFER Container Systems is one of the world’s leading suppliers of reusable stainless steel beverage containers for beer, wine and soft drinks, as well as for IBCs and special containers for solid and liquid substances and granulates.

SCHÄFER IT-Systems supplies both standardised and made-to-measure network and server cabinets, as well as data centre and water-cooled server cabinet solutions, which are planned, adapted to the specific projects and manufactured in our own company, on the basis of our extensive, future-oriented know-how and expertise. SCHÄFER Industrial Solutions develops, designs and manufactures customised punched and bent parts, machine cladding, special and standard housing solutions in metal.

Our great manufacturing expertise, our extensive range of production equipment and our employees’ outstanding level of qualification make SCHÄFER the ideal partner for contract manufacturing. By working with SCHÄFER, our customers can profit from measurable time and cost-saving benefits.
Our production locations

SCHÄFER IT-Systems, an innovative manufacturer of made-to-measure network and server cabinet and data centre solutions for both conventional and complex applications, is part of the internationally successful company SCHÄFER WERKE.

This owner-led group of companies has its headquarters in Neunkirchen in Germany’s Siegerland region. The work of all the SCHÄFER WERKE divisions – SCHÄFER IT-Systems, SCHÄFER Industrial Solutions, SCHÄFER Container Systems, SCHÄFER Perforated Metal and the EMW Steel Service Centre – is based on high-quality thin steel sheet. The processing of this material is one of the core competencies of this enterprise.