



# ISOM Digiware D-55 / D-75

Control and power supply interfaces

Insulation monitoring



ISOM Digiware D-75



Configuration with Easy Config System.

## Function

The power monitoring interfaces **ISOM Digiware D-55** and **D-75** allow the following:

- A local visualisation of data from ISOM Digiware L-60 and F-60 modules, but also from the other modules connected to the Digiware network or from COUNTIS E and DIRIS A over the RS485 bus
- Power supply of Digiware modules
- Access to this data over Ethernet

## Advantages

### High-resolution graphic screen

The screen displays various graphical objects such as bar graphs and insulation curves with measurement cursors.

### Secure power supply

The 24 VDC power supply prevents hazardous voltages on the cabinet doors.

### Ergonomic and easy to use

With its 10 buttons on the front panel, you can quickly access the measurement information. The Quick-Access button lets you quickly and easily navigate between the main operating screens.

It also makes it much easier to select and configure equipment and circuits.

Via an RS485 connection, the ISOM Digiware screen also acts as a gateway, centralising all measurements from the measuring devices and making this information available on Ethernet.

Version specially designed for healthcare establishments.

### Centralising measurement points:

- Selecting the circuit
- Viewing the data

### Email notifications

In the event of an alarm, the device can automatically send an email to prevent use (e.g. if there is an insulation fault).

### Embedded web server (D-75)

Accessed simply using the Web browser from a PC, this integrated function on the ISOM Digiware D-75 allows you to show the information from all connected devices (WEBVIEW-M function).

## The solution for

- > Industries
- > Energy production
- > Naval, military and railway infrastructures



## Strong points

- > High-resolution graphic screen
- > Secure power supply
- > Ergonomic and easy to use
- > Centralisation of measurement points
- > Email notifications
- > Embedded web server (D-75)

## Conformity to standards

- > IEC 61557-8
- > IEC 61557-9
- > IEC 61557-12
- > ISO 14025



## Approvals and certifications

- > Naval certifications <sup>(1)</sup>

(1) Certification in progress.

## Create your project

- > Find the best Digiware configuration: [www.meter-selector.com](http://www.meter-selector.com)



## Expert Services



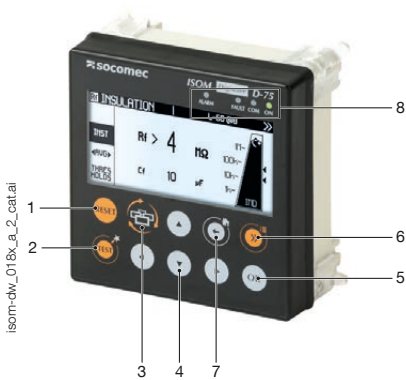
EXPERT SERVICES

Socomec offers a range of services to help you optimise your electrical installations and increase efficiency:

- Startup
- Checking the insulation monitoring architecture (NFC 15100)
- Fault-finding
- Training on the handheld fault location tool, ISOM PS-62

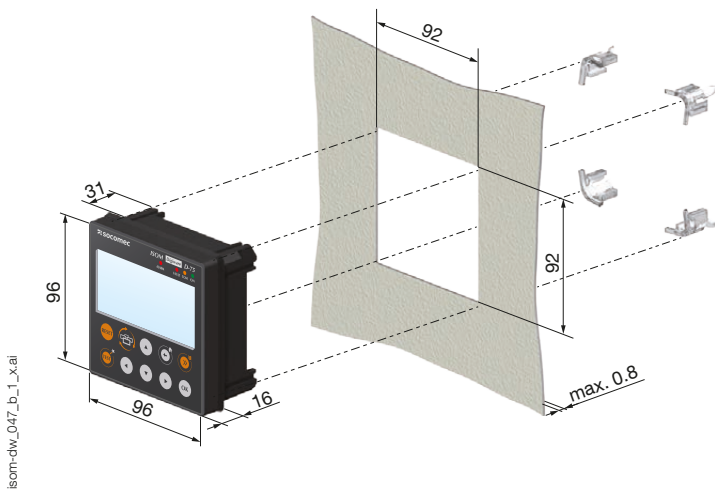
To find out more, ask your Socomec representative.

## Front panel

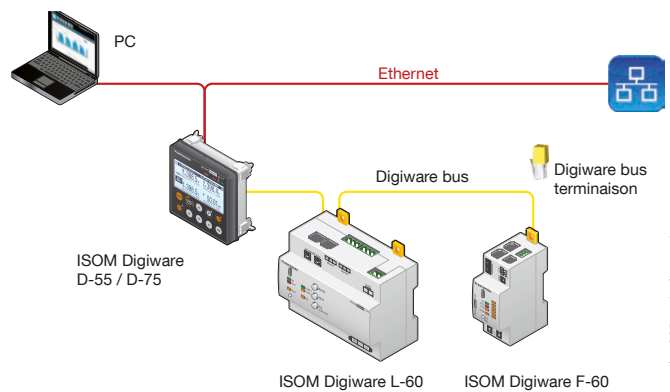
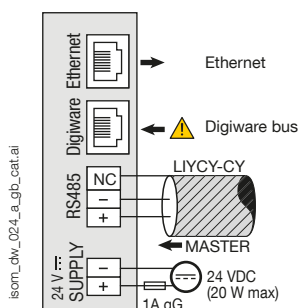


1. RESET: Reset alarms
2. TEST: Start test sequence on L-60 and F-60
3. Quick-Access button: Overall insulation → Rf and Cf curves → Specific circuit insulation → PMD measurements (if available)
4. Navigation buttons
5. OK button
6. Device selection
7. Home (long press)  
Back (short press)
8. LED indicators:  
ALARM: insulation fault  
FAULT: system alarm  
COM: com bus active  
ON: power on

## Dimensions (mm)



## Connections



# ISOM Digiware D-55 / D-75

Control and power supply interfaces

## Configuration

### Equipment power consumption

| Product                          | Power supplied (W) | Power consumed (W) |
|----------------------------------|--------------------|--------------------|
| <b>Power supply</b>              |                    |                    |
| P15 230 V / 24 VDC 15 W          | 15                 |                    |
| P30 230 V / 24 VDC 30 W          | 30 <sup>(1)</sup>  |                    |
| <b>Cables</b>                    |                    |                    |
| 50-metre bundle                  |                    | 1.5                |
| <b>System interfaces</b>         |                    |                    |
| ISOM Digiware D-55 / D-55h       |                    | 2.5                |
| ISOM Digiware D-75               |                    | 2.5                |
| <b>IMD / voltage module</b>      |                    |                    |
| ISOM Digiware L-60 / L-60h       |                    | 2.3                |
| DIRIS Digiware U-xx              |                    | 0.75               |
| <b>FLD modules</b>               |                    |                    |
| ISOM Digiware F-60               |                    | 0.5                |
| ISOM T-15 + ΔIP                  |                    | 0.05               |
| <b>Single-point alert report</b> |                    |                    |
| ISOM D-15h                       |                    | 0.5                |
| <b>Repeater</b>                  |                    |                    |
| DIRIS Digiware C-32              |                    | 1.5                |

(1) Max 20 W for use by the Digiware system.

### Calculation rules for the max. number of devices on the Digiware bus

The total power consumed by the equipment connected to the Digiware bus must not exceed the power from the 24 VDC. The power supply must not exceed 20 W.

#### Sizing with power supply P15 (reference 4829 0120) delivering 15 W

For example, it is possible to use

- 1 ISOM Digiware D-75 (2.5 W) display
- 1 ISOM Digiware L-60 IMD module (2.3 W)
- 25 metres of cable (0.75 W)

and

- 11 FLD ISOM Digiware F-60 (11 x 0.5 = 5.5 W) modules
- 66 adapters ISOM T-15 (66 x 0.05 = 3.3 W)

-> Total power = 14.35 W

#### Sizing with a supply P30 power supply (reference 4729 0603) can deliver max. 20 W to the Digiware system

For example, it is possible to use

- 1 ISOM Digiware D-75 (2.5 W) display
- 1 ISOM Digiware L-60 IMD module (2.3 W)
- 1 DIRIS Digiware U-xx (0.72 W) voltage module
- 25 metres of cable (0.75 W)

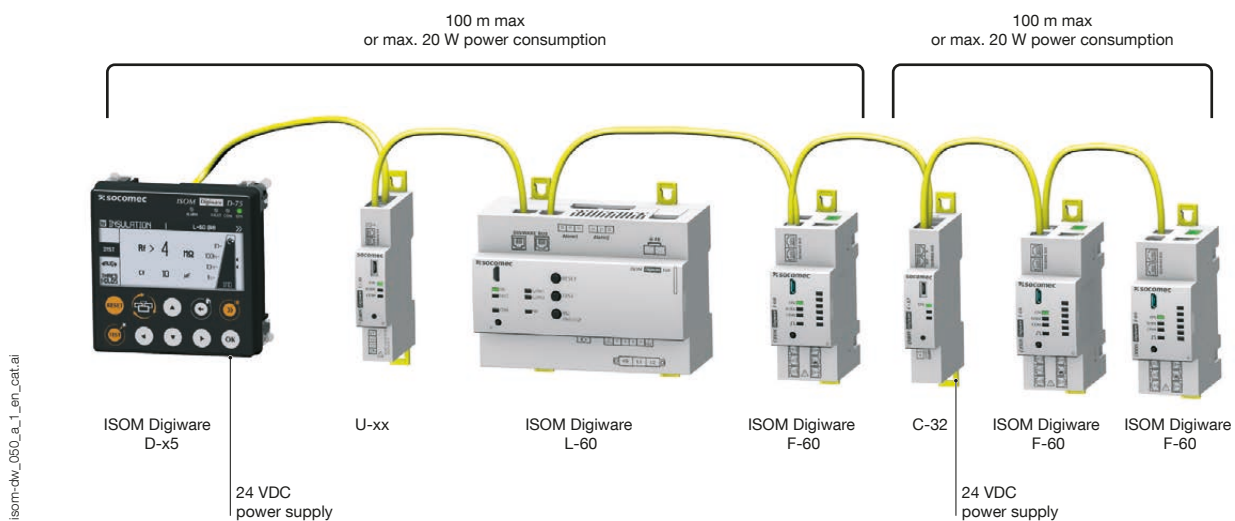
and

- 17 FLD ISOM Digiware F-60 (17 x 0.5 = 8.5 W) modules
- 102 adapters ISOM T-15 (102 x 0.05 = 5.1 W)

-> Total power = 19.87 W

### Repeater

Whenever the power consumption is higher than 20 W or the distance is greater than 100 m, a DIRIS Digiware C-32 repeater is required. In an ISOM Digiware system, a maximum of 2 repeaters may be used.



## Technical specifications

| Digiware bus                  |   |
|-------------------------------|---|
| Function                      | Connects ISOM Digiware modules              |
| Cable type                    | Specific Socomec cable with RJ45 connection |
| RS485                         |   |
| Connection type               | 2 to 3 half duplex wires                    |
| Protocol                      | Modbus RTU                                  |
| Baudrate                      | 1,200 to 115,200 bauds                      |
| Mechanical specifications     |   |
| Type of screen                | Capacitive touch-screen technology, 10 keys |
| Screen resolution             | 350 x 160 pixels                            |
| Front panel protection degree | IP 65                                       |
| Electrical specifications     |   |
| Power supply                  | 24 VDC +10% / -20%                          |
| Power consumption             | 2.5 VA                                      |

| Communication                               |  |
|---|--|
| Ethernet RJ45 10/100 Mbs                    | Gateway function:<br>Modbus TCP                          |
| RJ45 Digiware                               | Control and power supply interface function              |
| RS485 2-3 wires                             | Communication function with Modbus RTU slaves            |
| USB   | Upgrade and configuration via type B micro USB connector |
| Ports                                       |  |
| Inputs                                      | Digiware; RS485  |
| Outputs                                     | Ethernet RJ45  |
| Operating conditions                        |  |
| Storage temperature                         | -40 to 70 °C   |
| Operating temperature                       | -10 to +55 °C  |
| Relative humidity                           | 90% at 55 °C   |
| Installation category - degree of pollution | CAT III, 2   |
| Operating conditions (version t)            |  |
| Storage temperature                         | -40 to 85 °C   |
| Operating temperature                       | -10 to 70 °C   |
| Relative humidity                           | 97% at 55 °C   |

## References

| Standard displays   |   | Reference |
|---|---|-----------|
| D-55  | Multipoint display, Ethernet output                 | 4729 0203 |
| D-75  | Multipoint display, Ethernet output with web server | 4729 0205 |
| Heavy-duty display model  |   | Reference |
| D-75t   | Multipoint display, Ethernet output with web server | 4729 0206 |
| Power supply  |   | Reference |
| P15   | Power supply 100-240 VAC / 24 VDC 15 W              | 4829 0120 |
| P30   | Power supply 100-240 VAC / 24 VDC 30 W              | 4729 0603 |
| Accessories   |   | Reference |
| Flush mounting kit DIN 144 x 96 mm                              |   | 4729 0290 |
| IP65 flexible enclosure for 144 x 96 mm DIN frame               |   | 4729 0291 |
| DIN rail mounting kit for ISOM Digiware D-5x monitors           |   | 4829 0230 |
| Fuse holder, 1 pole + neutral to protect input voltages (RM)    | 4   | 5701 0017 |
| gG 10x38 1 A fuses  | 10  | 6012 0001 |
| DIN rail mounting kit for D-55 and D-75 monitors                | 1   | 4829 0230 |
| Digiware connection cables                                      |   | Reference |
| RJ45 cables for Digiware Bus                                    | Length 0.06 m                                       | 4829 0189 |
|   | Length 0.10 m                                       | 4829 0181 |
|   | Length 0.20 m                                       | 4829 0188 |
|   | Length 0.50 m                                       | 4829 0182 |
|   | Length 1 m  | 4829 0183 |
|   | Length 2 m  | 4829 0184 |
|   | Length 3 m  | 4829 0190 |
|   | Length 5 m  | 4829 0186 |
|   | Length 10 m   | 4829 0187 |
| 50 m reel + 100 connectors                                      |   | 4829 0185 |
| Termination for Digiware Bus (supplied with interfaces C and D) |   | 4829 0180 |
| USB configuration cable   |   | 4829 0050 |