

Recommended equipment to be used with IBS Products

Basic network elements

Network power supply:

The system can be powered from any stabilized 24V DC power supply that meets the power requirements of the network.

We recommend Mean Well AC/DC Switching Power Supplies:



Mean Well's DIN rail power supplies:

-DR-30-24 / DR-60-24 / DR-100-24

-MDR-20-24 / MDR-40-24 / MDR-60-24 / MDR-100-24

Recommended for modular DIN rail installations.



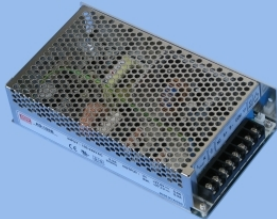
Mean Well's single output adapters:

-P30A-6P2J / P40A-6P2J / P66A-6P2J

-U65S108-P2J

-ES25A24-P1J / ES25A24-P1J

Recommended for distributed installation.



Mean Well's power supply with UPS function:

-AD-55B / AD-155B

Recommended where battery backup is required and IBS products (PS-2408-UPS / PS-2432-UPS) are not suitable.

Note: For this power supply to work as an uninterruptible supply, two 12V gel-type Lead-Acid batteries are required.

Network connectivity:

Network cable and connector:

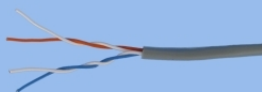
For network bus use a 2 pair 24AWG telecommunication cable.

Specs: -2 x 2 conductor (2 twisted pairs);

-24AWG solid wire (ϕ 0.5mm);

Ex: -Romcab TCYY 2X2X0,5 for indoor cabling;

-Romcab RD-Y(ST)Y 2X2X0,50 for outdoor cabling.

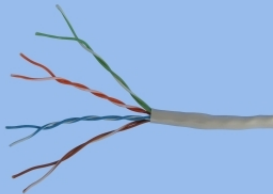


For connecting the devices to the bus use generic 4p4c modular connectors (RJ9).



Ex: -Molex 90075-0027
-Tyco 5-569030-5

Backbone cable and connector (for interconnecting hubs):



For backbone bus use generic UTP CAT5 cable.

Specs: -4 x 2 conductor (4 twisted pairs);

-24AWG solid wire (ϕ 0.5mm);

Ex: -Romcab TCYY 4X2X0,5 for indoor cabling;
-Romcab RD-Y(ST)Y 4X2X0,50 for outdoor cabling.

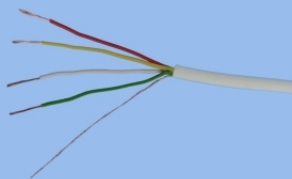


For connecting the hubs to the backbone bus use generic 8p8c modular connector (RJ45).

Ex: -Molex 90075-0141
-Tyco 5-569278-3

Accessories and end devices for the equipments

For thermostat and thermometer:



To connect the external temperature sensor to a thermostat or a thermometer use a stranded 4 wire 31AWG cable.

Specs: -4 stranded wires + optionally 1 wire for shield;

-31AWG copper wire (ϕ 0.22mm);

Ex: -Romcab - A 4X0,22



The thermostats can operate with most types of two state (ON/OFF) electro-valves/actuators.

Ex: -HERZ Armaturen - Actuating drive 1 7710 00
-HERZ Armaturen - Actuating drive 1 7710 80

For alarm sensors:

Alarm sensor interfaces support most types of alarm sensors, including:



- Motion sensors

Ex: -DSC LC-100PI



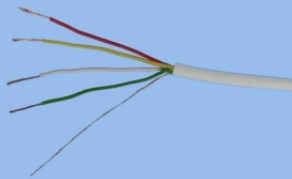
- Gas sensors

Ex: -Smoke sensor -NB 338 4H
-Methane gas sensor -NB 983 NG
-CO sensor -NB 983 CO



- Open door/window sensors

Ex: -FM-106
-SM-35



To connect alarm sensors (motion/smoke/gas/open-door sensor) to an alarm sensor interface use a stranded 4 wire 31AWG cable.

Specs: -4 stranded wires + optionally 1 wire for shield;
-31AWG copper wire (ϕ 0.22mm);

Ex: -Romcab - A 4X0,22

NOTE: Alarm sensor interfaces can be connected in parallel with most security control panels and to the indicator outputs of some security control panels.
Ex: DSC PC1616.

Any use of IBS alarm sensor interfaces in conjunction with a third party's alarm system is entirely at the buyer's risk, and the buyer agrees to defend, indemnify and hold harmless IBS from any and all damages, claims, suits, or expenses resulting from such use.

Access control systems:

General devices for physical access control:



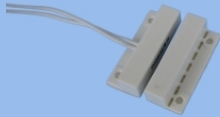
Access control devices support most types of electronic door locks.

Ex: -Strike lock: JIC 1710 / 1720 / 1711
-Magnetic lock: ELOCK 1200 / 600 / 300
-Door bolt: ELOCK B100



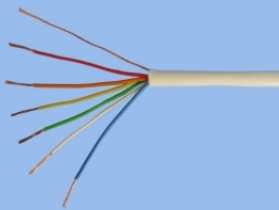
Electronic door locks require a separate 12V power supply to operate.

Ex: Mean Well DR-30-12



To most access control systems generic, contact based open door sensors may be connected:

Ex: -FM-106
-SM-35



To connect access card / iButton readers to access control devices use stranded 4 wire 31AWG cable.

Specs: -6 stranded wires + optionally 1 wire for shield;
-31AWG copper wire (ϕ 0.22mm);

Ex: -Romcab - A 6X0,22

For iButton-based access control systems:

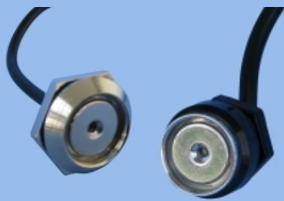
The identification token of an iButton-based access control system is an “ID only” iButton:

- Maxim – DS1990A.



“Key Fob” type mounting bases for iButtons are available

Ex: -Maxim – DS9093A / DS9093F / DS9093N .



iButton readers with a bi-color led are preferred if visual feedback of granted access is desired.

Ex: Demiurg CZ-2 M12 / CZ-2-S



Management of iButton access rights is possible on a PC fitted with an iButton probe using our dedicated management software.

iButton reader with USB adapter:

Maxim DS1402D-DR8 + Maxim DS9490R

For RFID (proximity card)-based access control systems:

The RFID-based access control system works with most proximity card readers with a 26-bit Wiegand interface, but for compatibility reasons with other IBS products we strongly recommend Rosslare proximity cards and card readers.



Outdoor reader: Rosslare AY-K12/ AY-J12 / AY-L12
Reader with keypad: Rosslare AYC-F64 / AYC-G64
Indoor reader: Rosslare AY-C12 / AY- D12
Indoor reader with bell key: Rosslare AY-C11/AY- D11



The identification token of an RFID-based access system is a proximity card / tag.
Standard proximity card: Rosslare AT-R14
Thin proximity card: Rosslare AT-R11
Proximity tag: Rosslare AT-R13



As a low cost hotel room occupancy switch our system can integrate a simple, contact based (non-smart) card holder.

Ex: Gewiss GW34 421 + Gewiss GW34 802

Radio remote control:



Remote control of system functions normally controlled by an external push-button is possible using third-party RF solutions with voltage-free contact-based outputs. Please contact IBS for details.

Ex: Elmes Elektronik UMB100H / DWB100H / CH4H

NOTE:

IBS systems are potentially compatible with a wide array of third-party devices not explicitly listed in this document. For information regarding any specific device's compatibility with our systems please see www.ibs.ro for details or contact information - we can devise specific connection diagrams or answer any questions you might have.