

Model name:

**BMS-IFMB0UEW-E**

## Safety instructions

### WARNING

Follow carefully these safety and installation instructions. Improper work may lead to serious harmful for your health and also may damage seriously the interface and/or the Hydro unit.

- This interface must be installed by accredited technical personnel (electrician, installer, or technical personnel) and following all the safety instructions.
- Before manipulating the Hydro unit, be sure it is completely disconnected from Mains power.
- Do not modify the unit. (A fire or an electric shock may occur)
- This interface must only be installed in a restricted access location by user.
- Do not install the unit in any of the following places.
  - Humid or wet place
  - Dusty place
  - Place exposed to direct sunlight
  - Place where there is a TV set or radio within one meter
  - Place exposed to rain (outdoors, under eaves, etc.)
- Use predefined cable and connect them certainly. Keep the connecting terminal free from external force. It may cause an exothermic or a fire.
- Strip the insulation from the cable that connects to the connector (RS-485 and A B bus) following the dimensions shown in the diagram below.
- When connecting the cable to the connector (RS-485 and A B bus), ensure the core wires do not protrude from the connector.
- Use two-core cabtyre cable.

## Installation instructions

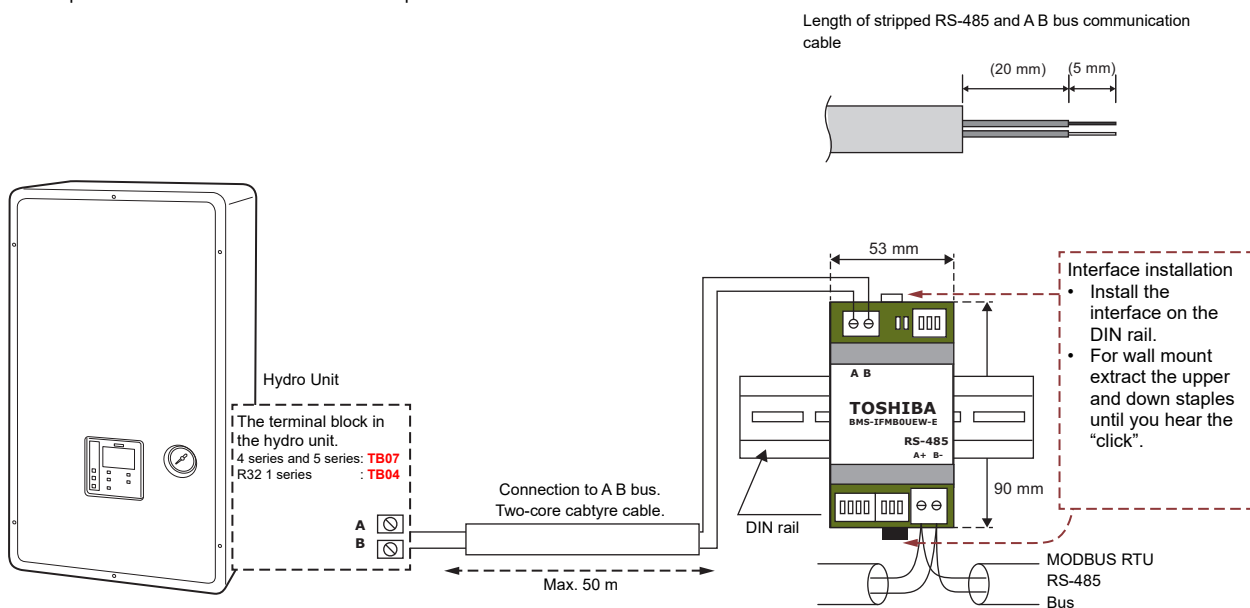
- Disconnect the Hydro unit from Mains Power.
- Fix the interface beside the Hydro unit (wall mounting) following the instructions in the diagram below or install it inside the Hydro unit (respect the safety instructions given above).
- Connect the interface to A B bus in any point of the bus. The A B bus is the bus that connects the Hydro unit and the wired remote controller, is a two-wire bus connecting terminals A B of both, this A B connection has no specific polarity.
- Connect the RS-485 bus to the connector RS-485 of the interface.
- Close the Hydro unit and reconnect it to Mains Power.
- Follow the instructions on the user manual for configuring and commissioning the interface.
- Follow the instructions of the next page to configure the interface through on-board DIP-switches.

### NOTE

The cable used for connection of BMS-IFMB0UEW-E to A B bus can be any two-core cabtyre cable, the maximum distance for bus A B is 50 meters, consult the manual of the Hydro unit for more details.  
Respect the maximum distance of 500 meters for the bus, no loop or star topologies are allowed for RS-485 bus, a terminator resistor of 120 Ω must be present at each end of the bus to avoid signal reflections and also a fail-safe biasing mechanism.

### IMPORTANT:

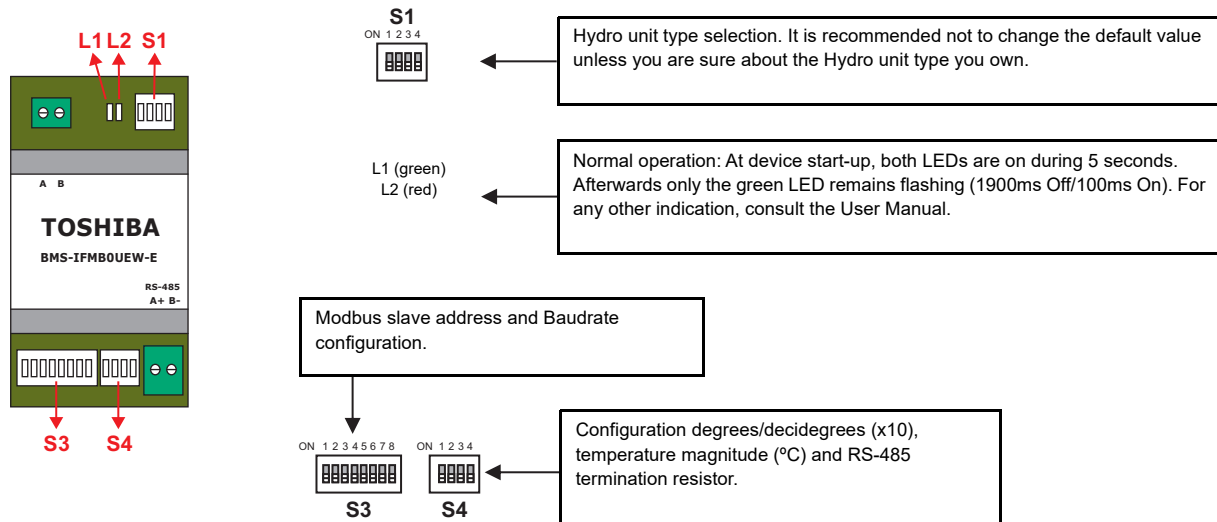
- Use only one remote controller. A sub-remote controller cannot be connected when connecting this interface.
- It is not possible to mix and connect Hydro unit 4 series, 5 series, and R32 1 series (WM and AIO type).
- Group connection for BMS-IFMB0UEW-E is up to 6 units.



### NOTE

In its place there is a pair of cables to connect the Remote Controller. Use these cables to connect the AB bus. Check your Hydro unit user or service manual for more information.

## Configuration through micro switches



### S1 - Hydro unit type selection

Switches 1 2 3 4	Description
↓ x x x	Hydro unit type. Advanced functionalities for Estia Hydro unit 5 series units. Please, check the user manual for more information.
↓ ↑ x x	Hydro unit type. Advanced functionalities for Estia Hydro unit 4 series units. Please, check the user manual for more information.
↑ ↓ x x	Reserve.
↑ ↑ x x	Hydro unit type. Advanced functionalities for Estia Hydro R32 1 series units. Please, check the user manual for more information. (default and recommended value)

### S3 - Modbus slave address and baudrate

Add	Switches 1 2 3 4 5 6	Add	Switches 1 2 3 4 5 6	Add	Switches 1 2 3 4 5 6	Add	Switches 1 2 3 4 5 6	Add	Switches 1 2 3 4 5 6	Add	Switches 1 2 3 4 5 6	Add	Switches 1 2 3 4 5 6	Add	Switches 1 2 3 4 5 6
0	↓↓↓↓↓↓↓	8	↓↓↓↑↓↓↓	16	↓↓↓↑↑↓	24	↓↓↓↑↑↑↓	32	↓↓↓↑↑↑↑	40	↓↓↓↑↑↑↑	48	↓↓↓↑↑↑↑	56	↓↓↓↑↑↑↑
1*	↑↓↓↓↓↓↓	9	↑↑↓↑↓↓↓	17	↑↑↓↑↑↓	25	↑↑↓↑↑↑↓	33	↑↑↓↑↑↑↑	41	↑↑↓↑↑↑↑	49	↑↑↓↑↑↑↑	57	↑↑↓↑↑↑↑
2	↓↑↓↓↓↓↓	10	↑↑↑↑↓↓↓	18	↓↑↑↑↑↓	26	↓↑↑↑↑↑↓	34	↓↑↑↑↑↑↑	42	↓↑↑↑↑↑↑	50	↓↑↑↑↑↑↑	58	↓↑↑↑↑↑↑
3	↑↑↓↑↓↓↓	11	↑↑↑↑↑↓↓	19	↑↑↑↑↑↑↓	27	↑↑↑↑↑↑↑	35	↑↑↑↑↑↑↑	43	↑↑↑↑↑↑↑	51	↑↑↑↑↑↑↑	59	↑↑↑↑↑↑↑
4	↓↑↑↑↓↓↓	12	↓↓↑↑↑↓↓	20	↓↓↑↑↑↑↓	28	↓↓↑↑↑↑↑	36	↓↓↑↑↑↑↑	44	↓↓↑↑↑↑↑	52	↓↓↑↑↑↑↑	60	↓↓↑↑↑↑↑
5	↑↓↑↑↓↓↓	13	↑↑↑↑↑↓	21	↑↓↑↑↑↓	29	↑↓↑↑↑↑↓	37	↑↓↑↑↑↑↑	45	↑↓↑↑↑↑↑	53	↑↓↑↑↑↑↑	61	↑↓↑↑↑↑↑
6	↓↑↑↑↓↓↓	14	↓↑↑↑↑↓	22	↓↑↑↑↑↓	30	↓↑↑↑↑↑↓	38	↓↑↑↑↑↑↑	46	↓↑↑↑↑↑↑	54	↓↑↑↑↑↑↑	62	↓↑↑↑↑↑↑
7	↑↑↑↑↓↓↓	15	↑↑↑↑↑↓	23	↑↑↑↑↑↓	31	↑↑↑↑↑↑↓	39	↑↑↑↑↑↑↑	47	↑↑↑↑↑↑↑	55	↑↑↑↑↑↑↑	63	↑↑↑↑↑↑↑

\* Default value

Switches 7 8	Description
↓ ↓	2400bps
↑ ↓	4800bps
↓ ↑	9600bps (default value)
↑ ↑	19200bps

### S4 - Degrees/Decidegrees (x10), temperature magnitude (°C) and RS-485 termination resistor

Switches 1 2 3 4	Description
↓ x x x	Temperature values in Modbus register are represented in degrees (x1) (default value)
↑ x x x	Temperature values in Modbus register are represented in decidegrees (x10)
x x x ↓	RS-485 bus without termination resistor (default value)
x x x ↑	Internal termination resistor of 120Ω connected to RS-485 bus *

\* Only in the interfaces connected at both ends of the bus must be activated the termination resistor, not in the rest. The RS-485 bus can be biased through internal jumpers JP2 and JP3. Consult the user manual for details.

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