

# LORAWAN® MODULE

## ULTRASONIC COMPACT ENERGY METER



### APPLICATION

The LoRaWAN®\* module is mounted inside a SHARKY 775 or a SCYLAR INT8 to transmit meter data to a receiving server via an LoRaWAN® network. The product is ideal for applications that require Long Range Wide Area Network and Low Power Wide Area Network (LPWAN). It is standard for wireless communication between battery-powered objects.

### FEATURES

- Designed for SHARKY 775 and SCYLAR INT 8
- 3 different message formats
- Battery-powered or AC-powered module
- For battery-powered models: up to 11-year battery life
- Internal or external antenna
- Automatic radio activation
- NFC interface for module configuration
- R3 radio as a fallback for walk-by/drive-by scenarios

## PRINCIPLE OF OPERATION

The LoRaWAN® module is installed in slot 1 of a SHARKY 775 or SCYLAR INT 8.  
In addition, the LoRaWAN® module can easily be retrofitted into an already deployed SHARKY or SCYLAR meter.

## MAIN FEATURES

| LoRaWAN® Module   |    |                                                                              |
|-------------------|----|------------------------------------------------------------------------------|
| Supply voltage    |    | Powered by an internal battery or mains power supply (24 volts or 230 volts) |
| Battery lifetime  |    | Up to 11 years* based on ECO mode                                            |
| Dimensions        | mm | 43 x 37 x 9                                                                  |
| Antenna connector |    | MCX female; internal antenna or optional external antenna                    |

\* Standard operating conditions and temperature.

## ENVIRONMENTAL SPECIFICATIONS

| LoRaWAN® Module       |    |                                                   |
|-----------------------|----|---------------------------------------------------|
| Operating temperature | °C | + 5 ... 55                                        |
| Operating humidity    | %  | 0 ... 93, RH (relative humidity), no condensation |
| Usage environment     |    | Inside the meter (IP 54)                          |
| Storage temperature   | °C | -20 ... +60                                       |

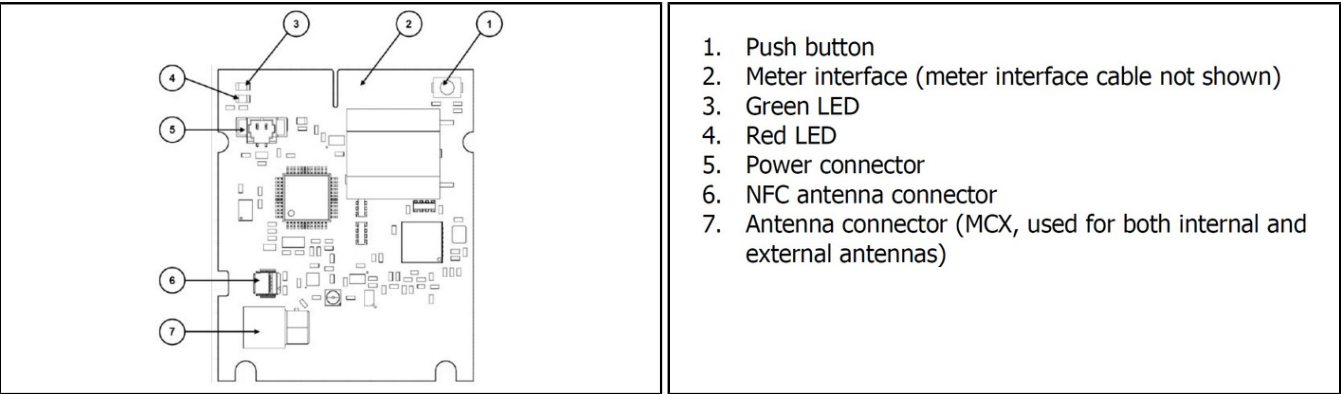
## MOBILE NETWORK CHARACTERISTICS

| LoRaWAN® Module       |     |                                                                                      |
|-----------------------|-----|--------------------------------------------------------------------------------------|
| Frequency band        | MHz | 868 (occupied bandwidth 200 kHz)                                                     |
| Transmit power (max.) | dBm | 13                                                                                   |
| Receiver sensitivity  | dBm | -135                                                                                 |
| LoRaWAN® version      |     | 1.0.2                                                                                |
| Activation            |     | Automatic after 3 hours of operation or via the OTC App; IZAR Mobile 3 (coming soon) |

TELEGRAM CONTENT

|                          | Standard | Combined heat/cooling | Compact |
|--------------------------|----------|-----------------------|---------|
| Energy                   | X        | X                     | X       |
| Cooling energy           | -        | X                     | -       |
| Volume                   | X        | X                     | -       |
| Power                    | X        | -                     | -       |
| Flow                     | X        | -                     | -       |
| Forward temperature (C°) | X        | X                     | -       |
| Return temperature (C°)  | X        | X                     | -       |
| Meter address            | X        | X                     | X       |
| Error flags              | X        | X                     | X       |

PRODUCT DRAWING



## **Economic Actor Information**

Applicable regulation and legal obligations for products may change.

DIEHL METERING monitors applicable regulation to ensure their products comply at the date of placing on the market.

Each economic actor making products available on the market thereafter must independently keep informed about the current applicable regulation.

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