

# CMi4160

## Integrated meter module for Diehl Sharky 775, LoRaWAN

CMi4160 is mounted inside a Diehl Sharky 775 to deliver meter data to a receiving server via a LoRaWAN network. The product has 11 years of battery life, is energy-efficient, has a long communication range and is easily retrofitted inside an already deployed meter. CMi4160 is easily configured through Elvaco OTC (via NFC). With CMi4160, Elvaco offers a meter communication module designed for customers that require a user-friendly and cost-effective solution.



## Technical specification

### Mechanics

Protection class	IP 54
Dimensions (w x h x d)	65 x 50 x 15 mm
Mounting	Module slot in Diehl Sharky 775
Weight	20 g

### Electrical connections

Supply voltage	Battery, life span 11 years
----------------	-----------------------------

### Electrical characteristics

Nominal voltage	VDC
Power consumption (max)	40 mA
Power consumption (sleep mode)	~3 $\mu$ A

### Environmental specifications

Operating temperature	+5 °C to +55 °C
Operating humidity	0 to 93 % RH, no condensation
Operating altitude	0-2000 m
Pollution degree	Degree 1
Usage environment	Indoors
Storage temperature	-20 °C to +60 °C

### Radio characteristics

Frequency	868 MHz
Output power	14 dBm
Receiver sensitivity	-135 dBm

### LoRaWAN characteristics

Device class	Class A, Bi-directional
LoRA version	1.0.2
Activation	OTAA or ABP
Data rate	DR0-DR5 (250-5470 bit/s)

### User interface

Green LED	Start-up/reboot/switch-off indicator
Red LED	Supercap indicator
Push button	Start-up / reboot / switch off module
Configuration	NFC via Elvaco OTC app or downlink data

### Approvals

LoRa Alliance®	LoRaWAN® Certified
EMC	EN 301489-1, EN 301489-3