
Communication settings on Iskraemeco electric smart meters

The troubleshooting guide is for the MT375 and ME372 electric GSM/GPRS smart meters and presumes the meter is correctly installed and powered up.

Most common causes of communication problems:

1. Poor GSM signal
2. Incorrectly installed SIM card
3. Meter not powered up

Meter is not sending SMS's to Sentinel

If the meter does not synchronise on Sentinel or is already synchronised but not sending SMS's to Sentinel this could be caused by:

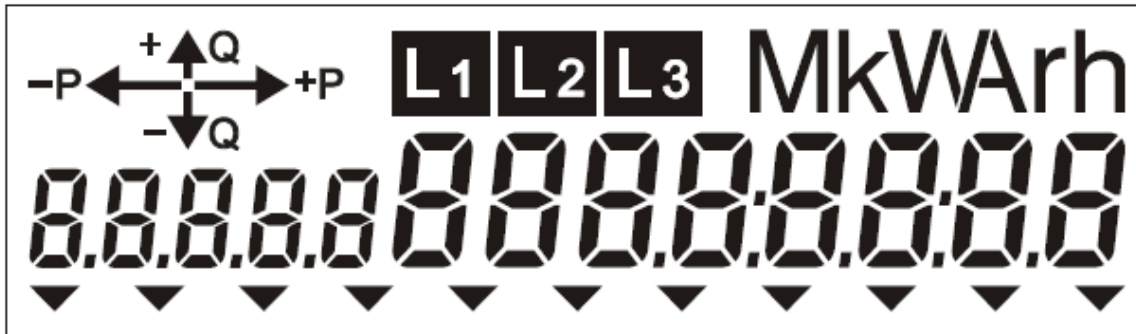
1. Poor GSM signal causing intermittent and infrequent SMS transmission
2. Meter is rejecting SMSs from Sentinel due to being synchronised with another service provider.
3. Date not set correctly and disrupted the scheduled delivery time

Sometimes the meter is contactable by GPRS data call even if SMS is not being received by Sentinel. Using Meterview try making a data call to the meter, this will prove if the meter is registered on the GSM network and therefore able to communicate.

If this doesn't work the last resort is to schedule a site visit to do some checks on the meter.

The meter's display

After trying to re-establish communication to the meter remotely without success, you will need to visit the meter to check a few things.



At the bottom of the display are 11 signal flags. The table below explains what each of the signal flags mean. For the purpose of troubleshooting communication issues, make sure that the **REG** and **SQ** indicators are both Lit. Both of these need to be visible for GSM communications to be established.

If only the REG is lit and the SQ is blinking then the signal quality is poor and a booster aerial and coupler should be installed.

INDICATION	STATUS	MEANING
T1,T2,T3,T4	Lit	The Tx tariff is active
	Blinking	Meter is programming mode when cover is removed.
BR	Lit	Billing reset is activated. It is lit until expiration of MD period
SD	Lit	Switching device has disconnected a customer (contacts are open)
SQ	Lit	Indicates signal strength: good covering with a GSM/GPRS signal
	Blinking	Bad GSM/GPRS signal quality. An external antenna is recommended
	Not lit	Very bad signal. An external antenna is required.
REG	Lit	Indicates the meter is registered with network and ready for communication
	Not lit	Not registered with GSM network provider and will not communicate
DRO	Lit	Meter data downloading or uploading in progress
	Blinking	Data package is present in the AMR communication network

FF	Lit	Fatal meter error (meter should be dismantled and sent for examination)
EC	Lit	Emergency credit is activated
	Blinking	When available credit crosses the emergency credit threshold

Check and reinsert SIM card

If the meter is not registered on the GSM network, this could be due to weak GSM signal strength or the SIM card is not correctly installed. Try removing and then reinserting the SIM card. Remove the terminal cover to access the SIM slot. If the slot or the SIM card is damaged this may prevent the contacts from touching the SIM card, thereby preventing the SIM from registered on a network.

PLEASE CHECK THAT YOU ARE INSERTING SIM CARD CORRECTLY:

1. open by pushing the metal holder inward, until you hear a click, movement is 4 mm
2. carefully insert sim card INTO HOLDER
3. do not insert sim card below the flap holder
4. start at an angle and slide the sim card between the metal and plastic parts of the holder
5. Slide the metal holder back – by 4 mm, to original locked position.
6. Never push the plastic flap down hard, as it will break.
7. If in doubt have a look at short video on our site: www.smsmetering.co.uk Inserting sim card video.

In summary.

Things to try remotely

1. GPRS data call using Meterview
2. Send SMS reset and try re-adding the device on Sentinel and resynchronise.

At the meter

1. Check the REG and SQ indicators on the meter display
2. Reinsert SIM if neither is showing.
3. Try a booster antenna if both indicators are still not showing or SQ is blinking.