Ground Control
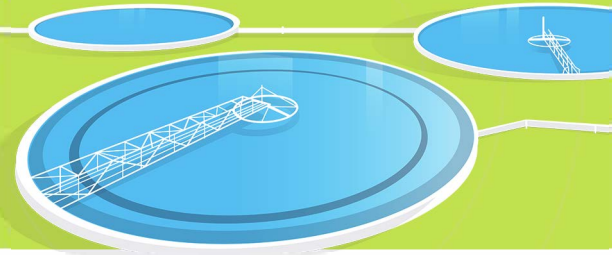
i-Cell - 1140 2G/LTE

The i-Cell 1140 LTE modem supports worldwide LTE category M1/NB1 (NBIoT) communications as well as providing legacy 2G quad band support.

It features a maximum downlink and uplink data rate of approx 300kbps. This next generation product supports all the new features specified by 3GPP to boost IoT applications, such as Power Saving Mode (PSM) and extended Discontinuous Reception (eDRX), which along with proprietary firmware from Ground Control allows the modem to wake up periodically to deliver data and then go back to sleep, providing ultra low power consumption for long term battery applications.

Key features of the i-Cell - 1140 2G/LTE

External & eSIM options

eUICC & iUICC capability

Supports 2G, LTE-M and NBIoT

Smart resilient SIM support

Remote configuration and status via app or browser

Low power for critical metering applications
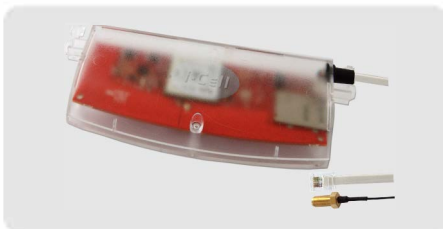
Elster A1140 and A1120 dedicated meter interface

Fully powered from meter interface

FOTA support

External and internal antenna, auto diversity

The iCell1140 is designed to fit the standard Elster A1140 meter range, and interfaces with the proprietary interface via an RJ12 connector.

It clips into place conveniently under the A1140 series terminal covers. A suitable antenna can be fitted via the flying lead or mounted remotely via an extension cable if required, to complement the internal antenna. Both internal and external antennas work together to provide signal diversity.

Specifications

4G Bands (MHz)	B1(2100), B2(1900), B3(1800), B4(AWS1700), B5(850), B8(900), B12(700), B13(700), B18(800), B19(800), B20(800), B26(850), B28(700)
2G Bands (MHz)	B2(1900), B3(1800), B5(850), B8(900)
Approvals	All major networks
LTE M1 Speed	Uplink up to 375 kbps Downlink up to 300 kbps
LTE NB1 (NBIoT Speed)	Uplink up to 62.5 kbps Downlink up to 21 kbps
EGPRS (2G Fallback)	Uplink up to 236 kbps Downlink up to 296 kbps
3GPP release 13 compliant	3GPP Rel. 12 Power Saving Mode (PSM) 3GPP Rel. 12 Power Saving Mode (PSM) 3GPP Rel. 13 Extended Discontinuous Reception (eDRX) 3GPP Rel. 13 Extended coverage
Power	Fully powered by Elster proprietary interface. Standby power 20mW
Communication	IPv4/IPv6 stack with TCP and UDP protocol, SMS where applicable
Interface	Elster proprietary meter interface.
Control	'AT' compatible commands and proprietary protocols
Configuration	Local via metering port, remotely via browser and app
Updates	FOTA compatible
Enclosure	Custom moulded fire resistant ABS housing, clips to meter supports.
Weight	90g
Operating conditions	-30 to +75 C operating; -40 to +85 C storage. Humidity 0-95% non-condensing
CE Certification	RED, EMC, LVD and all applicable standards