

i-Cell Elster A1700

D-Sub 2G/4G

Flexible cellular connectivity for electricity meters & legacy equipment



i-Cell Elster A1700 D-Sub provides remotely managed cellular connectivity for electricity meters and other equipment with a standard 25-way D-Sub serial interface.

Its true RS-232 interface supports straightforward integration with existing hosts, while power can be supplied through the interface or from an external 5–24 V DC source. Support for 4G Cat 1 bis, LTE-M, NB-IoT and legacy 2G helps maintain connectivity as cellular networks evolve.

Flexible SIM options, remote provisioning, low power operation and firmware updates over the air make it well suited to long term metering, telemetry and equipment modernization projects.

KEY FEATURES

Multi-Generation Cellular Connectivity

Supports 4G Cat 1 bis, LTE-M, NB-IoT and legacy quad-band 2G communications.

Standard D-Sub Integration

Connects to compatible hosts through an industry standard 25-way D-Sub socket and true RS-232 interface.

Flexible Power Options

Can draw power through the host interface or from an external 5–24 V DC supply.

Flexible SIM Technology

Supports external SIM and eSIM options, with eUICC and iUICC capabilities for remotely provisioned connectivity.

Remote Monitoring and Provisioning

View connectivity status and manage supported services remotely through a browser-based platform.

Low Power Operation

Supports Power Saving Mode, extended Discontinuous Reception and cyclic sleep for energy-conscious applications.

Flexible Antenna Installation

Available with an internal antenna option or an external antenna connection for remote mounting.

Firmware Updates Over the Air

Deploy supported firmware updates remotely, reducing the need for physical access to installed equipment.



TECHNICAL CHARACTERISTICS

INTERFACE AND INTEGRATION

Host Interface	Industry standard 25-way D-Sub socket
Serial Standard	True RS-232 / V.24
Serial Signals	RXD, TXD, DCD, DTR, RTS, CTS, RI and DSR
Control	AT-compatible commands and proprietary protocols
Local Configuration	Through the serial port
Installation	Compact design fits beneath many metering terminal covers

CELLULAR CONNECTIVITY

Supported Technologies	4G Cat 1 bis, LTE-M, NB-IoT and quad-band 2G
LTE Bands	B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B26 and B28
2G Bands	B2, B3, B5 and B8
LTE-M Speed	Uplink up to 375 kbps; downlink up to 300 kbps
NB-IoT Speed	Uplink up to 62.5 kbps; downlink up to 21 kbps
2G Speed	Uplink up to 236 kbps; downlink up to 296 kbps
IP Support	IPv4 and IPv6
Transport Protocols	TCP and UDP
Additional Messaging	SMS, where supported

POWER, SIM AND MANAGEMENT

Power Input	5–24 V DC external supply or power through the host interface
Alternative Battery Power	Compatible with a nominal 3.7–3.8 V lithium-ion cell
Standby Power	20 mW
Power Saving Features	Power Saving Mode, extended Discontinuous Reception and cyclic sleep
SIM Options	External SIM and eSIM options, with eUICC and iUICC capability
Remote Configuration	Via browser or app
Remote Updates	Firmware over the air

PHYSICAL, ANTENNA AND ENVIRONMENTAL

Dimensions	20 x 60 x 56 mm / 0.79 x 2.36 x 2.20 in
Weight	90 g / 3.17 oz
Enclosure	Custom molded, fire resistant ABS housing
Antenna Options	Internal antenna option or external antenna connection
Operating Temperature	-30°C to +75°C / -22°F to +167°F
Storage Temperature	-40°C to +85°C / -40°F to +185°F
Operating Humidity	0–95% relative humidity, non-condensing
Compliance	RED, EMC, LVD and applicable standards
Product Code	P001-4G-A1700