

Cello XT - AMR

Delivering commercial and industrial Advanced Metering Infrastructure (AMI) solutions with exceptional data integrity

Meter reads, profile data and user consumption alarms are automatically transmitted with the NB-IoT and LTE Cat M1 networks to a host computer or data centre at regular intervals providing a cost effective AMI solution.

Key Features

- Meter readings calculated by totalising pulses corresponding to known volume
- Compatible with low frequency pulse output meters
- Two pulse input channels with two pulse input replication channels
- Detection and alarm of unauthorised meter tampering
- Flow profile data stored at predetermined intervals
- Programmable index read time
- Certified for use in Zone 0 hazardous locations
- User configurable logging and transmission rates
- Bluetooth comms
- Wireless setup app option
- User replaceable SIM card
- Low power design provides typically > 5 years battery life
- Protected and tested against water ingress to IP56 (Certificate Pending)
- Internal antenna with external antenna options
- User replaceable battery with option for ATEX approved external batteries



Technical Specifications

Electrical Inputs	– 2 x flow (pulse) and 2 tamper detect - 10 Hz max – 2 x Pulse input replication
Modem	Antenna: Internal (optional external variant) – NB-IoT and LTE Cat M1 frequencies SIM: User replaceable SIM card
Data Transmission	Type: NB-IoT and LTE Cat M1 networks
Memory	Type: Non-volatile – Data storage 8000 profile readings and 256 index readings
Clock	Type: Crystal controlled calendar clock with leap year adjustment – Synchronises clock to local network at regular intervals
Supply	Life: Typical battery life > 5 years (daily transmission) – Powered by either an internal or external, certified intrinsically safe, lithium battery pack – Both batteries are user replaceable in the field including in the hazardous area whilst the equipment is live – Configuration and data retained during battery replacement
Recording	Interval: Programmable between 1 minute and 1 hour in defined increments Data storage: Rotating store
Alarm Dial-Out	– Programmable high and warning / low alarms – Alarm on tamper detection – Low battery alarm – Unlimited, server-side virtual alarms with user customisable logic
Certification	Certified for use in Zone 0 hazardous locations Certificates: CML 23UKEX2441X, Sira 23ATEX2440X & IECEx CML 23.0146X Ex ia IIC T4 (Tamb = -20°C to +60°C)
Environmental	Operating ambient temperature: -20°C to +60°C Ingress protection classification: IP56
Mechanical	Dimensions (mm): 199(h) x 127 (w) x 53 (d) Weight: With internal battery pack: 0.740 kg Without internal battery pack: 0.590 kg