

Non-Household Meters and Enhanced Metering Technology

Overview of suppliers and products*

Co*	Description	Mechanical meters									Static meters with AMR/Smart		Data				Contact
		Concentric (dumb)	Small (dumb)	Large (dumb)	Snap-on pulse output	Wired or snap-on AMR	Wired or snap-on AMI (smart)	Integrated pulse	Integrated AMR	AMI (smart) capability	small	large	Public Network Compatibility	Private Network Compatibility	Format	Freq	
Aclara	AMI, smart metering & comms infrastructure provider. Works with metering companies to enable smart metering.													Aclara RF solution			Martin Anderson
Arad	Produces wide range of meters and remote reading technology	Gladiator (in-line) Gladiator (concentric)	Gladiator (in-line) Gladiator (concentric) FAM Model M	WSTsb	Optical Encoder	Dialog 3G, LoRaWAN, NB-IoT	Dialog 3G, LoRaWAN, NB-IoT	Gladiator ER	Dialog 3G, LoRaWAN, Allegro, LoRa\OMS	Dialog 3G, LoRaWAN, NB-IoT, CatM, Allegro, OMS	Sonata, CZ5000	Octave, WSTsb	LoRaWAN NB-IoT CatM Dialog Cellular	Dialog 3G NB-IoT LoRaWAN Allegro (licenced frequency comms)	Txt, CSV, API, MQTT, etc., Platforms, CityMind, Harmony Encore, Web/Android/IOS customer portals, 3 rd party systems/apps	1 minute to daily smart meter data	Simon Ogden
Argiva	Smart metering and comms infrastructure provider. Works collaboratively with meter suppliers.													FlexNet Licensed comms & FlexNet hardware			Peter Goodwin
Axioma Metering	Inline, ultrasonic water meters with AMR (T1 OMS w-mbus) and AMI IoT – LoRaWAN - comms capabilities										Qalcosonic W1 (DN15-DN20)	Qalcosonic W1 (DN25-DN50)	Lora WAN NB-IoT wMBus	LoRaWAN open protocol NB IoT in CoAP over UDP (LwM2M foreseen in 2024) wMBus T1 OMS4	wMBus – standard sending interval every 300s (configurable) LoRaWAN - logs hourly and transmits 2-4 x day (16 hrs. loggings in every telegram). NB-IoT – hourly loggings, transmits 1 x day (48 hrs. historical values in every telegram, i.e. 24 hrs historical + 24 hrs backup per telegram).		Ingrida Eicinaite
Badger Meter	Inline meter supplier with AMR and AMI communications solutions						Orion Endpoint				E-Series Ultrasonic	E-Series Ultrasonic/ ModMAG M series	Orion cellular LTE-M/NB-IoT (connects to meter pulse output)	Bespoke portal with CSV export and API options	15-minute data transmitted 4x daily		Michael Davies
Blicker.ai	AI Image recognition based software that remotely read most meter types from photos													API, data is delivered in json format, meter photos and data can be accessed, filtered and exported from cloud portal	Record at any interval in which photos are taken		noelle.fischer@blicker.ai

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B4T	Consumption, flow and leakage information, enabled by up-cycler of existing meters using clip-on technology and low-power comms						Jellyfish			Microsoft Sphere Module			Network as a Service using Sigfox/Unabiz	0G- Sigfox radio stack	Bespoke portal/CSV file/JSON/API	Messages every 8 hours with hourly data for that period	Alex Barter
Connexin	AMI LoRaWAN smart metering & sensors, infrastructure and full end-to-end provider.												Network as a service LoRaWAN	LoRaWAN			Dan Preece
Deer Technology	Add-on camera-based systems that visually and remotely read most meter types					LimpetReader	LimpetReader and AutoReader						2G Cellular	Secure WiFi	Portal Viewer with CSV download capability, Automated email API integration into existing system	Monthly, weekly, daily & short bursts of hourly for leak analysis. User-defined water usage limit with automated email over usage alert	Craig Mellor
Diehl	Produces wide range of meters and remote reading technology	ALTAIR V4	ALTAIR V4	WESAN WS G	Pulse – clip on/clip off – up to 3 pulse outputs available	IZAR	IZAR				HYDRUS 2.0 R (in-line)	HYDRUS 2.0 B	WIZE, NBloT, LoRa, Sigfox	IZAR Radio network	IZAR Plus Portal is the MDM, IZAR@Home available as consumer App Data can be provided via API, CSV, bespoke data transfers	From 1 min, 15 min, hourly, daily, weekly etc	Sales
Dynosonic Limited	Manufacturer of advanced remote meter reading system for existing pulse output meters. 2-way comms with alarms for leakage, high/low flow, meter fault.					EcoKing							2G Cellular, NBloT		Bespoke data portal Cloud-based application, API functionality to allow auto transfer of data, Bespoke FTP file transfer, Apple and Android apps	Record at any interval	Jeremy Llewellyn
Flexim	Clamp-on ultrasonic flowmeters											FLUXUS WD series	RS485 (ASCII sender), Modbus RTU3, BACnet MS/TP, M-Bus, HART3, Profibus PA3, FF, H13, Modbus TCP3 and BACnet IP		No bespoke portal or web landing page – we just send data and leave others to decide how they wish to receive and display it	Continuous	Andy Hammond
Honeywell Elster	Produces wide range of meters and remote reading technology	V210	V100 V200	H4000 H5000 C4000 C4200	Falcon PR6/PR7 T-probe for V100	Merlin 434/868Mhz HB-G3 868Mhz	HB-G3	V200H V210H	V200H V210H	n/a	SM250 SM700 (in-line)	Q4000	NBLoT, LoRa, Sigfox	FlexNet (Arqiva)			Peter Lindsay
Itron	Produces wide range of meters and remote reading technology	Aquadis+	Aquadis+	Woltex M, Flostar	Cyble 5, Everblu	Cyble 5 (LoRa, Sigfox and wireless Mbus capable) EVERBLU	Cyble 5 (LoRa, Sigfox and wireless Mbus capable) EVERBLU				Intelis (in-line) Ultrasonic, Everblu, Cyble 5	Intelis C&I Ultrasonic, Everblu, Cyble 5	LoRa, Sigfox, wireless Mbus, Cyble 5	LoRaWAN Private Network	Everblu - Protocol / Data Format – RADIANT Protocol / Data - wM-Bus T2/C2, LoRaWAN™, Sigfox®, OMS v4	Everblu - Typically monthly but can be reconfigured down to hourly AMR Monthly (as above) AMI sigflow hourly, LoRaWan 15mins	Steve Maskell

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Metering Technology Solutions Ltd	AMR/AMI Smart Metering Provider. Supply, install and maintain AMI Solution for Wholesalers, Retailers and business customers.				G3 AMR/AMI Device (Wire-End)	G3 AMR/AMI Device (Wire-End)	G3 AMR/AMI Device (Wire-End)	Birdz G3 AMR/AMI Device (Integrated)	G3 AMR/AMI Device (Integrated)	G3 Device - provides AMR & AMI all-in, AMR - Walk-by & Drive-By, AMI - (LoRaWAN, Sigfox, NB-IoT, HR-NET)	G3 AMR/AMI Device Wire-End G3 AMR/AMI	G3 AMR/AMI Device Wire-End G3 AMR/AMI Device Integrated	LoRaWAN, Sigfox & NB-IoT	LoRaWAN - LoRaWAN Priv Maintained Network, HR-Net 868Mhz Priv Operated Protocol	Cloud Portal Data can be exported via API or FTP	5, 15, 30, 60 min, 6 hourly and daily	Robert Whittaker
Netmore Group	National LoRaWAN Network Operator enabling smart metering (AMI) across the country, working closely with meter manufacturers & software providers												LoRaWAN (subscription-based network), 5G	LoRaWAN, Private LTE/5G			Vadim Lyu
Quensus	Remote water management device to monitor and control meters and auto shut-off valve for advanced leak and flow monitoring with integrated intelligence				IWM	IWM	IWM	IWM	IWM	IWM			WiFi and/or cellular (LTE/4G)	BMS volt free contacts WiFi	FlowReporter web portal and app with the ability to export to CSV	Data recorded every 30s, sent every minute. Realtime view which shows consumption every 2 secs	Dan Simmons
Sensus	Produces wide range of meters and remote reading technology	620MC	620C	Meistream Meitwin	HRI HRI-Mei	Compact RF	Pulse RF and Remote endpoint	Cordonel	640C in-line 640MC (concentric) Meistream RF	640, Meistream RF and Remote endpoint	iPERL (in-line)	Cordonel	FlexNet Public	FlexNet (to Arqiva network)	Data is delivered in CMEP (CSV) format via Flexnet RNI	Standard granularity is hourly, but can be configured to shorter intervals (1, 5, 15, 30 mins) with a trade off in battery life	Loic Flageul
Shayp	Shayp gives water consumption insights in buildings to eradicate waste & improve efficiency. AI reveals leakages and anomalies. Suitable for multi-residential, commercial and institutional buildings												Public network compatibility; data logging over NB-IoT and Sigfox		Data logger with 15 year battery life. Bespoke portal and JSON API providing detailed information, operational data and insights on anomalies, potential savings for end-customers	30 sec data transferred hourly	Sales
Sleer Innovations BV	Add-on scanner-based systems that visually and remotely read all meter types. Remote read and IR sensor magnetic to monitor & control meters and valves. Remote read and mgt sensor to monitor & control meters and valves.	Kendry 221C, Talis 2009A & Cato22203L, Mike 2301M & Cato2203M	All models, WSTsb, Gladiator (concentric) FAM	All models, WSTsb, Gladiator (concentric) FAM	Photo decoder, optical encoder, pulse – clip on/clip off – up	LoRa, LoRa_Compact RF	LoRa, LoRa_Compact RF	Multi-solution				Infrared serial port	LoRa_FSK_GFSK	LoRa WAN & Private Network	API data is delivered in JSON format, meter photos & data can be accessed filtered and exported from cloud portal	Data recorded as requested by admin, sent every instant. Monthly, weekly, daily and short bursts of hourly for consumption analysis. Admin-defined water usage limit	Contact

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Smarter Technologies Group	End-to-end Smart Metering provider. AMI, AMR solutions. UK Wide Smart metering communications Network: ORION				Orion Multi Solution	Orion Multi Solution	Orion Multi Solution	Orion Multi Solution	Orion Multi Solution	Orion Modbus	Orion Modbus		Orion Network	Orion Network	Bespoke portal/ App, CSV file	Real-time and as standard transfer the data every 2 mins	Matt Walker
Utilities Manager	Water efficiency software with user-friendly display and analytical/ benchmarking tools. Can take data from any hardware												2G, 3G, 4G, 5G, LoRaWAN. Portal online with unique customer login	Scripts prepared to receive data as required (inc. LoRaWAN Priv maintained network)			Andrew Smedley
Waterfall	Advanced metering solution for live water event monitoring and billing using fixed network data capture. Also features water pressure, temperature and auto shut-off valve							Capable of adding Pulse Meter		Microsoft Sphere Module	Waterfall event inline meter		NB-IoT, LoRaWan, WiFi 4G/5G Cellular (NBloT / CatM1)	LoRaWAN, Bluetooth5	bespoke portal/ App, CSV file	Power & wifi get 15min data every 15mins Wifi gets LIVE data	Phil Riddles

***Disclaimer** The list above is not intended to imply endorsement of specific companies or technologies, nor is it intended to be comprehensive. If suppliers have amendments, additions or updates they would like to see included, please contact comms@mosl.co.uk.

Descriptions

Mechanical meters	Meters that detect the flow of water using either rotary pistons or impellers	Snap-on Smart Integrated pulse	An AMR device that can either be a remote unit connected to a pulse output or a snap-on unit An in-built pulse output with wired connection
Static meters with AMI/Smart	Meters that have no moving parts and detect the flow of water using either electromagnetic or ultrasonic principles. These meters generally have an electronic register and can provide an electronic readout for use by AMR (Automatic Meter Reading) or AMI (Advanced Metering Infrastructure (i.e. 'smart')) communication systems	Integrated AMR	An inbuilt AMR device
Concentric (dumb)	A meter with a single threaded connector that can be installed in a boundary box or water manifold. A dumb meter has a mechanical register that can be read visually.	Smart capability Comms system	An inbuilt radio output for connectivity to a fixed network communication system
Small (dumb)	Small meters are defined as those with concentric fitting or two threaded in-line connectors	Public Network	Fixed network comms system providing connectivity between meter and central data store
Large (dumb)	Large meters have flanged connectors and are bolted-in	Private Network	A fixed network comms system that is publicly available for smart metering systems to use
Snap-on pulse	A pulse output from a meter for the purpose of providing a remote count of consumption that snaps-on to the meter	Compatibility	A fixed network communication system that is installed and operated by an AMI (smart) metering system provider
Wired or Snap-on AMR	A device that enables communication with a fixed network communication system that can either be a remote unit connected to a pulse output or a snap-on unit		