

## T210 Electronic Outreader

Inexpensive and reliable, the ScanCounter T210 is the cost effective solution to meter reading access problems. The ScanCounter T210 electronic outreader is designed specifically for accurate counting of water meter pulse outputs. It incorporates an easy to read display.



### Features

- High integrity pulse counting
- Fully configurable
- Long battery life
- Operates at  $-30^{\circ}\text{C}$  to  $70^{\circ}\text{C}$
- Leak detection
- 'Touch Free' reading
- Display meter reading
- Holds last read value
- 'Bypass' & 'Main' display icon
- 8 digits displayed
- Supports bi-directional pulsers
- Incorporates a watchdog
- Installed away from pit meters improving access safety
- Installed in easy to access locations to deal with difficult to access meters

### Reduced meter reading costs

The ScanCounter T210 is installed in a location, leading to safe, easy access for meter reading. Connected to the water meter pulse output by wire, the

T210 accumulates pulses from the water meter and stores the reading. The meter reading and serial number is transmitted to a touch read device. This enables you to simply and cost effectively migrate your system from a visual to an electronic reading. The T210 installed today as part of a visual read system, is the same T210 used tomorrow as an electronic reading system. The T210 is part of the ScanRead System, enabling all types of pulse meter to be read by the same electronic meter reading system.

### Fully configurable

The T210 can be used with any meter with a pulse output. The meter reading is easily pre-set at time of installation. To reduce time and errors in the field, configuration is carried out using an Elster programmer, eliminating the complexity of having to press buttons in the right sequence found in less sophisticated products. The T210 is

programmed with a specific serial number or customer account number at the time of installation.

### Customer Service

The T210 can be configured to detect suspected fraud, for example, the cutting of pulse input wires. It can also tell you if no water has been consumed for 30 days, indicating potential meter stoppages or removal of pulse probes.

Providing a warning when long periods of continuous flow are detected, the T210 can also be configured to detect leaks. The warning is transmitted with the meter reading every time the meter is read.

## Performance

Configuration options	
No. of digits displayed	4,5,6,7,8
Scale factor	1 to 2000
Programmable 10 alpha numeric serial no.	
Programmable initial meter reading	
Leak monitor	
Tamper	Non usage, wire cut, magnetic supplies
Choice of units	M <sup>3</sup> , gallons, litres, Cu ft, kl.
Inputs	Any reed switch or open collector pulser

### Physical

Housing	High impact polycarbonate
Drop test	1m drop onto concrete
Dimensions	120mm (h) x 70mm (w) x 38mm (d)
Weight	150g

### Environmental

Sealing	IP67 (electronics enclosure) IP44 (terminal enclosure, can be IP67 with non-corrosive silicon gel or sealant applied over the terminals on installation)
Operating temperature	-30°C to +70°C
Operating humidity	95% RH

### Electrical

Power source	3.6V Lithium battery Operating life is not affected by the number of pulses counted
Battery low indicator	On LCD and in data output
Max. input frequency	40Hz
Worst case mark-space Ratio	12-75% (Reed switch) 30-70% (Open collector)
Low pass cut frequency	12.5Khz
Software Watchdog	1 sec

Approvals	CE marked
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## Additional features

The T210 incorporates fully sealed electronics, with a permanently connected battery for reliability. A sophisticated combination of digital signal processing and current pulse techniques provides integrity pulse counting. The T210 is compatible with all major hand-held meter reading devices.

### ScanCounter T210

The T210 has an 8 digit liquid crystal display (LCD). The 6mm character height makes the display easy to read and following careful selection of materials, the LCD is designed to survive temperatures as low as -30°C.

The number of digits displayed can be set to between 4 and 8, enabling the display to show the full meter reading or only billing units.

An activity icon on the display indicates when pulses are received by the T210, simplifying installation and testing. A cover is provided to protect the LCD from high levels of ultra violet light, and also to provide shade to facilitate reading in high sunlight conditions. The display can indicate tampering and the possibility of leaks in the customer's systems.

A location is provided on the housing for a meter serial number label.

This product contains lithium batteries which must be disposed of by a qualified disposal agency. Under no circumstances should they be crushed or incinerated.



Elster Metering Limited  
Pondwicks Road  
Luton, Bedfordshire  
LU1 3LJ, United Kingdom  
Telephone +44 (0)1582 402020  
Facsimile +44 (0)1582 438051  
Website: [www.elstermetering.com](http://www.elstermetering.com)  
E-mail: [water.metering@gb.elster.com](mailto:water.metering@gb.elster.com)