TESLA SOLO · DRIVE-BY AMR, READY FOR AMI

Tesla Solo

Drive-by today. AMI tomorrow.

A 450 MHz water endpoint that reads by drive-by now and moves to fixed network AMI when you add a collector, with no programming and no change at the meter.

Drive-By AMR | Private RF 450 MHz | AMI Ready | Made in the USA



3.5 mi	120 days	15 min	20 yr
to a collector[8]	of hourly reads stored	AMI transmission interval	battery life[1]

HYBRID AMR / AMI

Grows with your system

Start with Tesla Drive. Add a Fixed Network Collector and the Solo starts reporting to the office on its own. Out of collector range, it still reads by drive-by.

RANGE

Up to 3.5 miles to a collector

Licensed 450–470 MHz frequencies and a through-the-lid antenna that sits above the mud and water in the pit.[8]

TWO-WAY

More than a read

On-demand reads, time sync, near real-time alarms, shut-off valve control and over-the-air firmware updates.

INSTALL

Plug and play

Factory configured, ships inactive and wakes up when the encoder shows water use. Pit, vault or wall, same product.

KEY SPECIFICATIONS

Network	Private RF Network, 450–470 MHz licensed, point-to-multipoint; drive-by AMR with Tesla Drive
Range to collector	Up to 3.5 miles to a Fixed Network Collector[8]
Read strategies	Drive-by AMR, fixed network AMI, or both at once, with no programming
Network type	Two-way[5]
AMI read resolution	Hourly
AMI transmission interval	Every 15 minutes
Major Leak alarm	Sent immediately
On-board storage	120 days of hourly reads, per port

BUILT FOR THE PIT

Rugged, encrypted, meter neutral

ENCODERS

Meter neutral

Works with any encoder register that uses the UI-1203 protocol and detects most major brands for extended data. Ideal for upgrading walk-by systems.

LONG LIFE

Super-duty construction

IP68, fully potted solid state, built to be submerged for its service life, with a tuned high-surface-area antenna.

SECURITY

Encrypted both ways

AES-256 encryption and authentication with a time-synchronized protocol on utility-licensed frequencies.

PATH TO AMI

Want two networks?

For a public cellular path as well as the Private RF Network, see the Tesla Duo.

SPECIFICATIONS (CONTINUED)

Meter flags and alarms	Back flow, tamper, leak, major leak, encoder disconnect, diagnostic and battery status, plus extended flags from multiple meter brands[4]
Meter interface	Encoder (UI-1203 and extended protocols) or pulse; single or dual port
Meter compatibility	All RG3 meters and encoders and most major water meter brands[4]
Remote shut-off	Open, close or reduced flow, controlled from Tesla MDM or Tesla Drive[6]
Security	AES-256 encryption and authentication
Synchronization	Endpoint clock within 1 minute
Firmware updates	Over the air on the Private RF Network, or on site with Tesla Drive
Battery	Non-replaceable D-cell lithium thionyl chloride with hybrid layer capacitor
Battery life	20 years[1]
Approvals	FCC Parts 15 and 90
Installation	Interior or exterior wall, pit or vault, through the lid[3]; 2-1/8 in pit lid hole
Connection	Bare wire (splice), RG3, Nicor or other industry-standard connectors
Data resolution	4–8 digits[2]
Environmental	IP68, fully potted solid state; -40 to 185 °F (-40 to 85 °C); 0–100% humidity
Physical	Height 6.5 in · thread width 1.8 in · cap at threads 1.98 in · base 3.2 × 3.1 in · 1 lb · black
Software	Tesla Drive (drive-by), Tesla MDM (office)
Warranty	20 years (10 full, 10 prorated)[1] [7]

Tesla Drive + Tesla MDM Drive-by reads, data logs and fixed network reads all land in Tesla MDM.

[1] Battery life warranty is void if the product is stored more than 1 year before installation and activation.

[2] Reports all digits electronically available from the register.

[3] Best performance in a pit or vault under a non-metallic lid.

[4] Contact RG3 for specific meters, flags and alarms supported.

[5] Two-way: time sync, remote configuration, on-demand reads, data log retrieval, valve control and over-the-air firmware updates.

[6] Contact RG3 for specific valves supported.

[7] See the RG3 standard warranty for details.

[8] Typical range; actual range depends on terrain, buildings, antenna height and pit lid.