



**TOTAL ECLIPSE**

**ECLIPSE<sup>®</sup>**  
**706GWR**  
Advanced Guided Wave Radar Transmitter

Enter a new phase in level  
and interface control performance.





# ECLIPSE® 706 GWR

Advanced Guided Wave Radar Transmitter

## The Future of Guided Wave Radar Has Taken Shape.

There is a reason our guided wave radar (GWR) line is called ECLIPSE®. Having introduced the very first two-wire, loop-powered guided wave radar transmitter to industrial liquid level applications, Magnetrol® has designed its latest-generation Model 706 to overshadow current levels of GWR performance.

More than ever, today's process industries require safe, efficient and cost-effective control of applications having extreme temperature and pressure conditions. Guided wave radar has become the premier technology for those challenging applications – with the ECLIPSE Model 706 leading in GWR transmitter performance.

### The Model 706:

- Exhibits best-in-class accurate and reliable level measurement
- Is virtually unaffected by fluctuating process conditions including density, dielectric, viscosity and specific gravity.
- Has the superior signal strength to take on a broad range of challenging applications.
- Has no moving parts and requires no calibration.

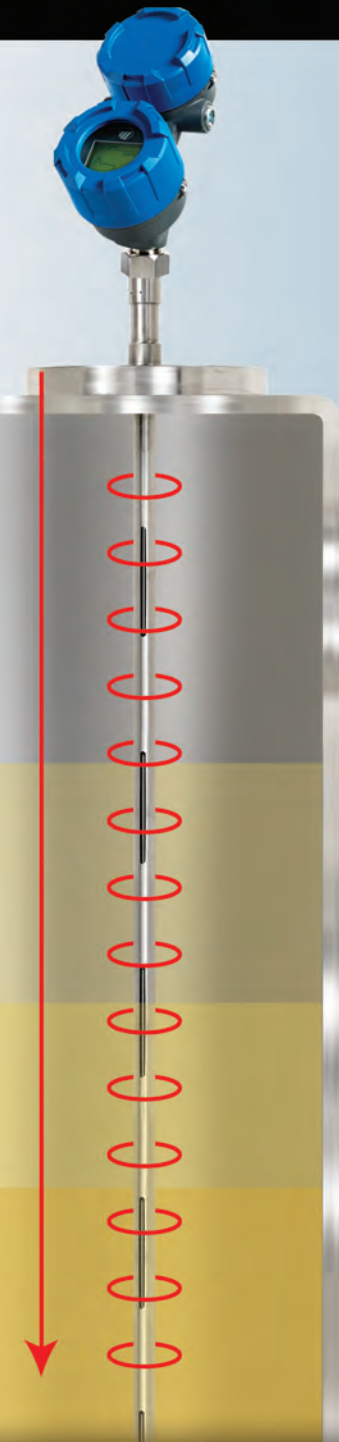


*Intuitive user interface with graphic LCD display.*

*Higher pulse amplitude and superior signal-to-noise ratio as compared to competitive GWR designs.*

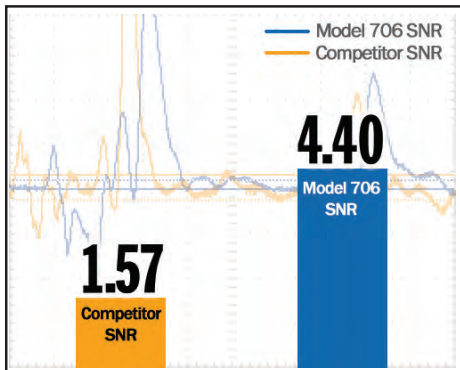
*Reduced system noise and stronger transmit signal make the Model 706 ideal for low dielectric media.*

*Extended measuring ranges up to 100 feet.*



## Superior Signal Performance

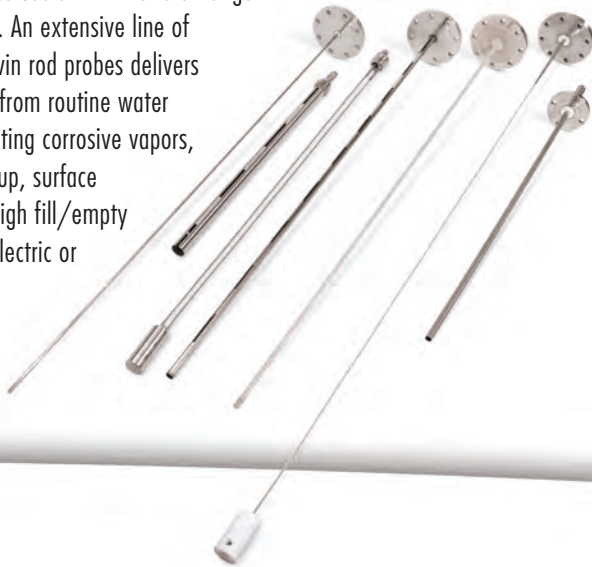
The ECLIPSE Model 706's innovative GWR circuitry achieves both a higher transmit pulse amplitude and improved receiver sensitivity, resulting in superior signal-to-noise ratio, as compared to competitive GWR devices. The undeniable result is more margin and more robust operation in every level application, including extremely low dielectric media, extended measuring ranges and punishing conditions where foaming, boiling or flashing can occur.



*The ECLIPSE Model 706 has a signal-to-noise ratio (SNR) almost **300% higher** than the nearest competitor!*

## Probe Configurations for Every Application

The ECLIPSE Model 706 provides users with the total range of GWR measurement solutions. An extensive line of dedicated coaxial, single and twin rod probes delivers accurate, reliable level control, from routine water storage to process media exhibiting corrosive vapors, foam, steam, coating and buildup, surface agitation, bubbling or boiling, high fill/empty rates, low level and varying dielectric or specific gravity conditions.

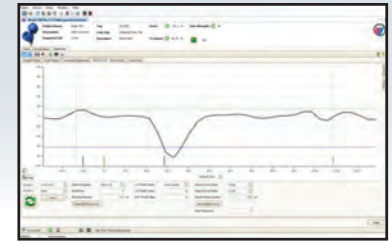


## Advanced Diagnostics

The ECLIPSE Model 706 takes the user interface experience to new levels of convenience and functionality. The LCD diagnostics convey critical real-time waveform and trend data with outstanding ease of use.



- 4-button user interface and graphical LCD display provide enhanced depth of data, indicating on-screen waveforms and troubleshooting tips.
- Can be programmed to automatically capture waveform data by time or by event occurrence.
- Conforms to NE 107 standards.



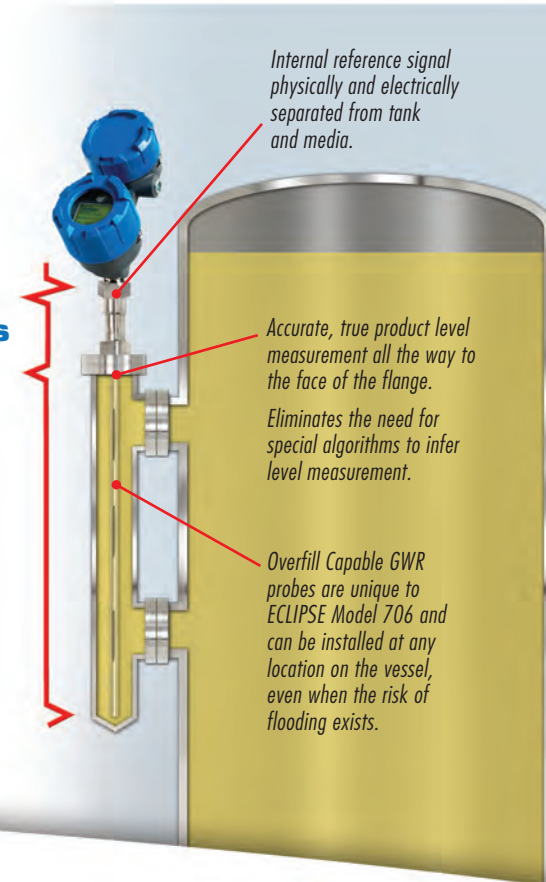
*New redesigned DTM has been developed for advanced troubleshooting.*

## Convenient Pre-Configuration

Our exclusive "Pre-Configuration" feature gives you what you have always wanted... a transmitter you can take out of the box, apply 24 VDC to, and WALK AWAY!

## Overfill Capable Probes

Magnetrol offers the only guided wave radar transmitter on the market with a full range of Overfill Capable Probes. Unlike other GWR transmitters that use algorithms to infer level readings in top-of-the-probe dead zones, the ECLIPSE Model 706 measures true level to within specification all the way up to the process flange. Coaxial and single rod Overfill Capable Probes can be installed in various configurations, even when the risk of flooding exists.



## ECLIPSE Model 706 Guided Wave Radar Solutions

Industries	Applications
Petroleum Refining	Liquefied Gases, Crude Storage, Distillation Columns, Blending Tanks, Finished Product Storage
Power Generation	Feedwater Heaters, Deaerators, Condensate Tanks, Finished Product Storage
Chemical Manufacturing	Chemical Injection, Mixing and Blending, Scrubber Vessels, Finished Product Storage
Water & Wastewater	Clarifier Level, Sludge Level, Lime Slurry Level
Pulp & Paper	Pulp Storage, Pulp Washing Systems, Bar Screens, Finished Product Storage
Food & Beverage	Ingredient Storage, Mixing Vessels, Cookers, Finished Product Storage
Pharmaceutical	Reactors, Buffer Prep, CIP Applications, Finished Product Storage

### Rediscover the Leader in Guided Wave Radar

Magnetrol introduced guided wave radar technology to industrial liquid level instrumentation back in 1998, and our innovation has eclipsed existing level control performance *again*. The smart choice for GWR is the ECLIPSE Model 706 – offered by Magnetrol, the global level and flow experts.

Feature	Eclipse 706
Process Temperature Range	-320° F to +850° F (-196° C to +454° C)
Process Pressure Range	Full Vacuum to 6250 psi (430bar)
Digital Communications	HART® 7.0, FOUNDATION fieldbus™
Menu Languages	English, French, German, Spanish, Russian
SIL2 Hardware (Safety Integrity Level)	Functional Safety to SIL 2 as 1oo1 in accordance with IEC 61508 (Full FMEDA available upon request)

**Push the Limits of Level and Interface Performance for Your Operation.**  
Contact your Magnetrol representative to learn how the ECLIPSE Model 706 can help take your safety protocols and process efficiencies to the next level.



CORPORATE HEADQUARTERS

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