

## The Wireless Engine: Rail Repeater



The CSI Wireless Engine is the industry's only rail repeater to feature GPS (Global Positioning System) technology and digital filtering to enable uninterrupted voice and data services for high-speed train commuters. Utilizing state-of-the-art components, the Wireless Engine digital repeater system facilitates the desired Wireless Service Providers (WSP) signal by instantaneously switching filter configurations based upon GPS coordinates and WSP spectrum holdings. Currently deployed on the leading high-speed train in Northeast corridor of the US, the Wireless Engine line of rail repeaters is specifically designed to provide wireless coverage for rail applications. CSI's product offers many leading-edge benefits over traditional rail repeaters such as complete remote monitoring and control. Fleet operators no longer need to revisit installations to swap BDAs or repeaters to reconfigure the required pass-bands. Virtually any passband requirement can be met by reconfiguring the software either on-site

or remotely, saving time and money. Operators can stock one model that meets all market configurability requirements, considerably reducing inventory costs and deployment time. High filter selectivity eliminates adjacent channel interference and allows carrier specific frequencies to be amplified.

The new GPS-based digital rail repeater offers:

- Multi-band configurations - covers virtually any pass-band requirement
- Multitechnology capabilities - covers virtually any transmission technology (CDMA, GSM, UMTS, WCDMA, LTE, AWS, public safety, etc)
- Smaller footprint - easily fits into small areas or compartments
- Unlimited spectrum agility is both automatically and remotely configurable on the fly
- Sharp digital filtering
- GPS based filter switching allows carriers to manage capacity/ traffic along route
- Complete remote monitoring and control
- Auto-Shutdown based on RSSI
- .5 to 5 Watts of output power
- N type connectors for lower loss than competitors units
- Moisture and dust-proof
- Works from -30 to +55 degrees C
- 60 to 90 Volt DC input

