

Commercial and Enterprise Applications

Use Cases at a Glance



Primary Application	How FreeWave Is Used	
Oil & Gas	 Supervisory Control and Data Acquisition (SCADA) Sensor communication (C1D1, C1D2) Plunger lift Tank levels and water meters Pumps, valves, and flow lines Auto Vehicle Location (AVL) 	 Flare stacks Dehydrator temperature Separator pressure Emergency Shut Down (ESD) Cathodic protection Network resiliency (mesh to re-route, cell for backup)
Water/Wastewater	 Storage tank levels Master meters – turbines, magnetic flow Pumping stations Sewer lift stations 	 Treatment plants Chemical injection sites Specialty process control devices
Smart Grid & Solar	 Distribution Management (DMS) Distribution Automation (DA) Substation Automation (SSA) Load Management (LM) 	 Demand Response (DR) Energy Management (EMS) Supervisory Control and Data Acquisition (SCADA)
Environmental Monitoring	 Seismic monitoring Geothermal monitoring Subsea monitoring Water level monitoring 	River flow monitoringLeak detectionLevee performance testing
Electric Power & Utilities	 Power generation stations Infrastructure Emissions control Fault Condition Indicator (FCI) Supervisory Control and Data Acquisition (SCADA) 	 Auto Meter Infrastructure (AMI) backhaul Capacitor bank monitoring Recloser communications Regulator monitoring
Location Tracking	Food & beverage communicationIrrigation control	• Golf, distance from pin
Precision Agriculture	Precision steering and guidanceIrrigation	Fertilizer and pesticide applicationFeedlot controls
Turf & Pivot Irrigation	Center pivot mobile water systemWater control above ground for canals	• Ground based water source

Other Applications	How FreeWave Is Used	
Mine Safety & Rescue	Emergency communications, video monitoring	
Wind Turbine	Gas content, radon, vibration monitoring	
Asset Management	Stationary asset monitoring, predictive analytics	
Fleet Management	Mobile asset monitoring, predictive analytics	
Traffic Control	Traffic control, video monitoring	
Education	School campus – last mile, remote research, video monitoring/surveillance	
Healthcare	Virtual medicine, remote diagnostics and diagnosis, last mile connectivity	
Public Safety	Police, EMS, 1st responders, video monitoring/surveillance	



