

	SRS SafeRailSystem
TECHNICAL SPECIFICATIONS	
Sensor Frequency	400 MHz
Radar Acquisition Unit	DAD SRS PLUS, with interleaved multiplexing 1800 scans/sec
Number of Collected Profiles	Up to 4
Antenna Frequency	Typical configuration: 400 MHz
	Alternate frequencies available upon request
Positioning	Doppler Radar GPS (optional)
Collection Speed	> 190 km/h (4 profiles simultaneously)
Maximum Scan Length	Unlimited collected profile length, no need to stop the train
Power Supply	10 - 15 Volts
Video Camera	Synchronized radar and video data
Environmental	IP65
SOFTWARE SPECIFICATIONS	
Radar Processing Software	SRS DPA including:
	SRS DP (Data Processor)
	SRS DA (Data Analyzer and Reporting)
	Elimination of disturbances due to the sleepers
	Automatic data processing according to a predefined macro
	Management of GPS data and video frames
	Automatic detection of layer interfaces
	Automatic calibration of radar propagation velocity with core data
	Insertion of assets along the track (e.g. switches, crossings, etc.)
	Assists the operator in evaluating track characteristics:
	Ballast fouling Ballast bed moisture
	Moisture distribution within the ballast
	Evenness of track bed basis
Output Data	Immediate visualization of ballast characteristics along the track:
	Stratigraphy
	Ballast fouling levels
	Ballast moisture levels
	Undulation levels

