



Model 1225 / 1250 Railcar Identification Systems

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DESCRIPTION

Systems Associates has developed an Automatic Railcar Identification System based on the Association of American Railroad Standards for rail equipment tagging. In 1995, the railroads and car owners completed a three year project to tag all interchange railcars. These electronic tags contain certain information about the railcar such as the owner and car number that would be useful in automating the identification process of railcars at various sites including plant entrance and exit points and in weighing applications.

The Model 1225 and 1250 Readers produce an output for each tag passing in front of one of two antennas. A typical system is configured with two antennas where one faces each side of the railcar. The tagging standard requires two tags per car, with one on the leading right side of the car and one, on the trailing left side. SAI has produced electronic equipment and software which associates the tag information with the appropriate car taking into account the possibility of untagged cars and cars with faulty tags.

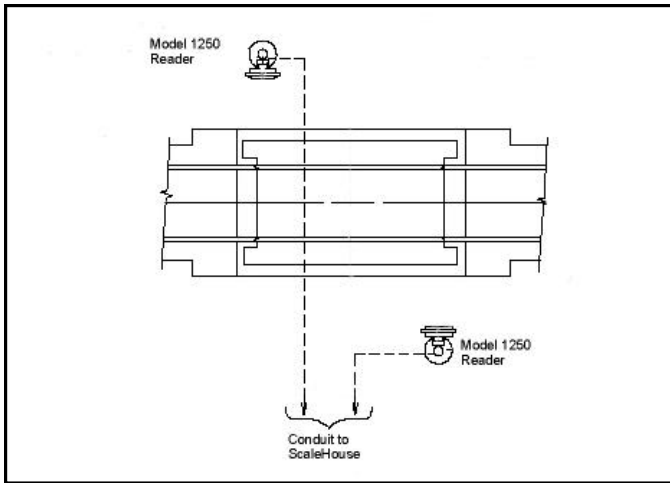


SITE LAYOUT CONSIDERATIONS

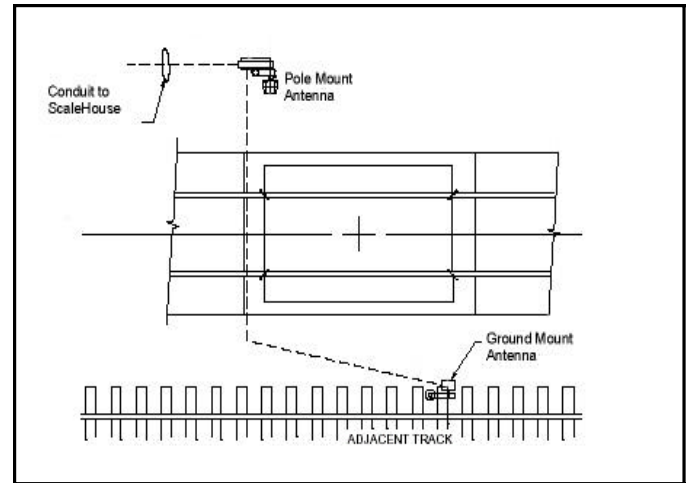
Systems Associates uses the Model 1225 and 1250 Railcar Identification systems on coupled in motion, un-coupled in motion and static scale applications. The layout of the site will determine whether the Model 1225 or Model 1250 is the correct choice. The Model 1250 utilizes two pole mounted antennas. If there is another track adjacent to the scale track, pole mounted antennas could present a personnel safety hazard to train crew members while performing some switching activities. A minimum of 22 feet between the scale track and the adjacent track centerlines is required to use a Model 1250 Railcar Identification system. If there is no adjacent track, the Model 1250 will be the correct choice.

If there is less than 22 feet between track centerlines, the Model 1225 Railcar Identification system would utilize one or two ground mounted antennas (depending on how many adjacent tracks). The ground mounted antennas can be mounted in between the rail ties of the adjacent track (see drawing). The ground mounted antennas, mounted between the ties do not present a safety hazard to switching crews.

Model 1225 / 1250 Railcar Identification System



Model 1250 Site Layout on coupled in motion scale



Model 1225 Site Layout on coupled in motion scale

Data Integrity

Systems Associates utilizes two antennas on both the Model 1225 and Model 1250 Railcar Identification systems. Both tags on the railcar are read. On some competitors systems, only one antenna is used. One antenna systems do not account for damaged or missing tags, thus producing a report with a lower identification rate. A two antenna system inherently has better data integrity than a one antenna system.

Specifications

Power	16-28 VDC or 16-20 VAC (a stepdown transformer to convert 120 VAC to 18 VAC is provided).
Frequency:	910-921.5 Mhz (selectable)
RF Power Output	Up to 1.5 watts
Communication:	RS-422 (RS-422 to RS-232 short haul modems are provided for communications with scale.)



Specifications subject to change without notice
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