

IEEE Standard for Environmental Conditions for Transit Railcar Electronic Equipment

IEEE Vehicular Technology Society

Sponsored by the
Rail Transportation Standards Committee

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IEEE Std 1478-2001)

IEEE Standard for Environmental Conditions for Transit Railcar Electronic Equipment

Sponsor

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IEEE Vehicular Technology Society

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Abstract: Baseline environmental conditions under which transit railcar electronic equipment shall both operate and/or survive are specified in this standard.

Keywords: atmospheric pressure, Authority Having Jurisdiction, corrosive elements, equipment under test, humidity, IEEE 1478™, shock, temperature, vibration, water

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Introduction

This introduction is not part of IEEE Std 1478™-2013, IEEE Standard for Environmental Conditions for Transit Railcar Electronic Equipment.

This standard establishes environmental conditions under which transit railcar electronic equipment shall both operate and/or survive, but not the conditions to be considered for the calculation for reliability. Environmental conditions specified include: temperature, humidity, vibration, mechanical shock, corrosives and abrasives, precipitation, flooding, ultraviolet radiation, and altitude. This standard does not cover electromagnetic interference (EMI) or radio frequency interference (RFI). Environmental conditions depend upon equipment location such as vehicle exterior—axle mounted, truck sprung and body mounted and vehicle interior—non-conditioned and conditioned. This standard is intended to cover the application of electronic equipment. It may be applied with consideration to electrical equipment and subsystems.

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