

# IEEE P802.3cg

## 147.10.2.1 Environmental safety

David D. Brandt, Rockwell Automation

Scott Griffiths, Rockwell Automation

George Zimmerman, CME Consulting

Tim Baggett, Microchip Technology, Inc.

# Purpose

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- The purpose of this presentation is to:
  - Fill out empty IEEE P802.3cg Clause 147.10.2.1 Environmental safety
  - Based on brandt\_cg\_01\_0518.pdf and BASE-T clauses

# Environmental safety

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## **147.10.2.1 Environmental safety**

This subclause sets forth a number of recommendations and guidelines related to safety concerns; the list is neither complete nor does it address all possible safety issues. The designer is urged to consult the relevant local, national, and international safety regulations to ensure compliance with the appropriate requirements.

Systems described in this subclause are subject to various environmental hazards during their installation and use. In particular, equipment used in automotive and industrial environments can expect to meet the potential environmental stresses with respect to their mounting location defined for the application. Stresses expected in these environments may include but are not limited to those found in the listed specifications.

The following specifications describe potential environmental stresses in an automotive environment:

- a) General loads: ISO 16750-1
- b) Electrical loads: ISO 16750-2, ISO 7637-2:2008, and ISO 8820-1
- c) Mechanical loads: ISO 16750-3, ASTM D4728, and ISO 12103-1
- d) Climatic loads: ISO 16750-4 and IEC 60068-2-1/27/30/38/52/64/78
- e) Chemical loads: ISO 16754-5 and ISO 20653

The following specifications define potential environmental stresses in an industrial environment:

- a) Environmental loads: IEC 60529 and ISO 4892
- b) Mechanical loads: IEC 60068-2-6/31
- c) Climatic loads: IEC 60068-2-1/2/14/27/30/38/52/78.

Additional environment(s) require careful analysis prior to implementation to determine appropriate environmental safety requirements.