

NEMA TS 5-2017

Standard for Portable Traffic Signal Systems (PTSS) Standard



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Portable Traffic Signal Systems (PTSS) Standard

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Acknowledgments

At the time that NEMA TS 5-2017 was prepared, the following NEMA members and their representatives were active voting members of the NEMA 3TS Portable Traffic Systems Technical Committee (3TS PTS TC):

- Horizon Signal Technologies, Inc. www.horizonsignal.com (Chair)
- Ver-Mac, Inc. www.ver-mac.com
- OMJC Signal, Inc. www.omjcsignal.com
- John Thomas, Inc. www.jtitraffic.com

Previous 3TS PTS TC participants include:

- North America Traffic, Inc. www.northamericatraffic.com
- Tower Sign & Signal, Inc. www.portabletrafficsignalstss.com

At the time that NEMA TS 5-2017 was balloted, the following were members of the NEMA Transportation (3TS) Section:

- Adaptive Micro Systems, Inc. www.adaptivedisplays.com
- Applied Information, Inc. appinfoinc.com
- Daktronics, Inc. www.daktronics.com
- Eberle Design Inc. www.editraffic.com
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- Skyline Products, Inc. www.skylineproducts.com
- TransCore, ITS, LLC www.transcore.com
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Foreword

NEMA TS 5-2017, this standard, was prepared by NEMA's Portable Traffic Signal (PTS) Technical Committee (TC), which is a technical committee of NEMA's 3TS (Transportation Management Systems and Associated Control Devices) Section.

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Section 1 General [Informative]

1.1 Scope

NEMA TS 5-2017 covers traffic signaling equipment used to facilitate and expedite the safe movement of vehicular traffic and the work that goes on in the respective work zone. Portable Traffic Signal Systems (PTSS) are commonly used to supersede flagger use during roadway construction. While PTSS are used most commonly for single-lane road closures, PTSS are also used during or after times of emergencies, planned events, and non-normative vehicular signalization needs. PTSS are also used before or while permanent signals are being installed to lessen traffic bottlenecks and improve intersection safety during these transition times. PTSS are designed to enable critical movement of traffic using the implementation of appropriate new and existing standards.

Manual on Uniform Traffic Control Devices (MUTCD) Section 6F.01 states:

All traffic control devices used for construction, maintenance, utility, or incident management operations on a street, highway, or private road open to public travel (see definition in Section 1A.13) shall comply with the applicable provisions of this Manual.

In addition, PTSS address many of the factors related to the design and application of temporary traffic control systems and provide much of the functionality, described in MUTCD 6F.84(08).

Also see an FHWA Official Interpretation concerning “Conflict Monitoring of Temporary and Portable Signals” in Annex A.

1.2 References

The following standards (normative references) contain provisions that, through reference in NEMA TS 5-2017, constitute provisions of NEMA TS 5-2017. Additional documents and standards (other references) are referenced that might provide a more complete understanding. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on NEMA TS 5-2017 are encouraged to investigate the possibility of applying the most recent versions of standards indicated.

1.2.1 Normative References

AASHTO LTS 6-2013	<i>Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 6th Edition, with 2015 Interim Revisions</i>
ATC ITS Cabinet v01	<i>Intelligent Transportation System (ITS) Standard Specification for Roadside Cabinets</i>
ITE ST-052-E	<i>Vehicle Traffic Control Signal Heads: LED Circular Signal Supplement, 2005</i>
MUTCD	<i>Manual on Uniform Traffic Control Devices (2009 MUTCD with Revision Numbers 1 and 2 incorporated, dated May 2012)</i>
FHWA HOTO-1	<i>FHWA Interpretation Letter, 4(09)-10 (I), Conflict Monitoring of Temporary and Portable Signals, (HOTO-1), May 26, 2011</i>
NEMA 250-2014	<i>Enclosures for Electrical Equipment (1,000 V Maximum)</i>