# NEMA Standards Publication TS 5-2021

Portable Traffic Signal Systems (PTSS) Standard

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#### **Acknowledgments**

At the time that NEMA TS 5-2021 was prepared, the following NEMA Members and their representatives were active voting Members of the NEMA TN-TS Portable Traffic Systems Technical Committee (TN-TS 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. https://portabletrafficsignalstss.com

At the time that NEMA TS 5-2021 was balloted, the following were Members of the NEMA Transportation (TN-TS) Section:

- Adaptive Micro Systems, Inc. www.adaptivedisplays.com
- Applied Information, Inc. appinfoinc.com
- Daktronics, Inc. www.daktronics.com
- Eberle Design Inc. www.editraffic.com
- Horizon Signal Technologies, Inc. www.horizonsignal.com
- Intelight Inc. www.intelight-its.com
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- OMJC Signal, Inc. www.omjcsignal.com
- Parsons delcantechnologies.com
- Peek Traffic Corporation www.peektraffic.com
- SES America sesamerica.com
- Siemens Industry, Inc. www.usa.siemens.com/Industry
- Skyline Products, Inc. www.skylineproducts.com
- TransCore, ITS, LLC www.transcore.com
- Ver-Mac, Inc. www.ver-mac.com

#### Foreword

NEMA TS 5-2021, this Standard, was prepared by the NEMA Portable Traffic Signal (PTS) Technical Committee (TC), which is a technical committee of the NEMA TN-TS (Transportation Management Systems and Associated Control Devices) Section.

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## Section 1 General [Informative]

#### 1.1 Scope

NEMA TS 5-2021 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.