

ZENO® 3200 NTCIP COMPLIANCE STATEMENT

The ZENO® 3200 is the electronics in the RPU tower box. It's operating system (firmware) is known as ZENOSOFT®. ZENOSOFT® is compliant with NTCIP General Conformance Level 2 as defined in the **Recommended Technical Revisions for NEMA Standards Publication TS 3.2-1996 Simple Transportation Management Framework** meaning it supports the Simple Network Management Protocol Version 1 (SNMPv1), High-level Data Link Control (HDLC) as required in the NTCIP Class B Profile, the Simple Transportation Management Protocol (STMP), creation & deletion of dynamic objects, get & set data functions and all mandatory objects defined in the Transportation Management Information Base (TMIB). The ZENO® 3200 also supports a number of Environmental Sensor Station (ESS) objects listed in the proceeding table as defined in **NEMA Standards Publication TS 3.7-199X, NTCIP Object Definitions for Environmental Sensor Systems (ESS), Draft Version 97.01.11.**

The following table describes this situation. Please note that there are "yes" answers to all mandatory conformance requirements.

Type of Conformance	Type of Compliance	Answer
General Conformance, Conformance Level 1 (SNMPv1).	Mandatory	YES
General Conformance, Conformance Level 2 (Conf. Level 1 plus STMP, TMIB, and dynamic objects).	Optional	YES
Management applications must be able to read ASCII text ASN.1 MIB modules.	Mandatory	YES
Objects defined in the Class B Profile shall be supported.	Mandatory	YES
Global Object Definitions Configuration Group	Mandatory	YES
Global Object Definitions Database Management Group	Optional	NO
Global Object Definitions Time Management Group	Mandatory	YES
Global Object Definitions Time-base Event Schedule Group	Optional	NO
Global Object Definitions Report Group	Optional	NO
Global Object Definitions STMP Group	Optional	NO
Global Object Definitions PMPP Group	Optional	NO
ESS Configuration Group	Mandatory	YES
ESS Location Group	Mandatory	YES
ESS Pressure	Optional	YES
ESS Wind Data	Optional	YES
ESS Mobile Wind Data	Optional	NO
ESS Basic Temperature Data	Optional	YES

ESS Enhanced Temperature Data	Optional	YES
ESS Basic Precipitation Data	Optional	YES
ESS Standard Precipitation Data	Optional	YES
ESS Enhanced Precipitation Data	Optional	NO
ESS Emerging Precipitation Data	Optional	NO
ESS Solar Radiation	Optional	YES
ESS Visibility Data	Optional	YES
ESS Standard Pavement Sensor Data	Optional	YES
ESS Enhanced Pavement Sensor Data	Optional	NO
ESS Standard Sub-surface Sensor Data	Optional	YES
ESS Enhanced Sub-surface Sensor Data	Optional	NO
ESS Emerging Mobile Platform Data	Optional	NO
ESS Pavement Treatment	Optional	NO
ESS Air Quality	Optional	NO
ESS Staffed Station	Optional	NO