

MODEL 5721-05 RWIS Road Sensor Station

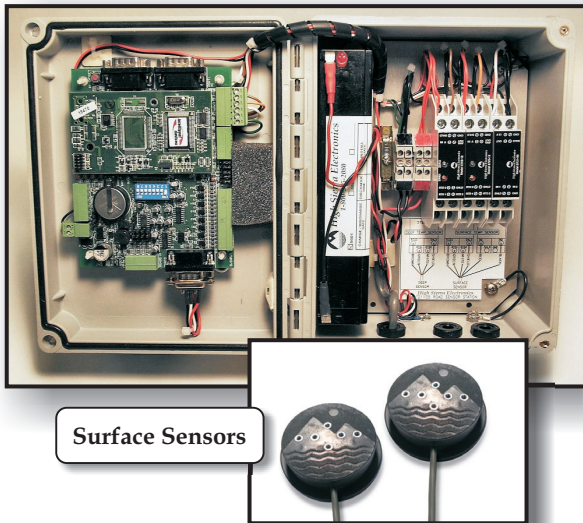
- Detects Moisture and Ice
- Monitors and Reports Real-Time Road Conditions
- NTCIP Compliant
- ISO 9001:2008 Certified



PHONE: (800) 275-2080

HIGH SIERRA ELECTRONICS

FAX: (530) 273-2089



Surface Sensors

DESCRIPTION:

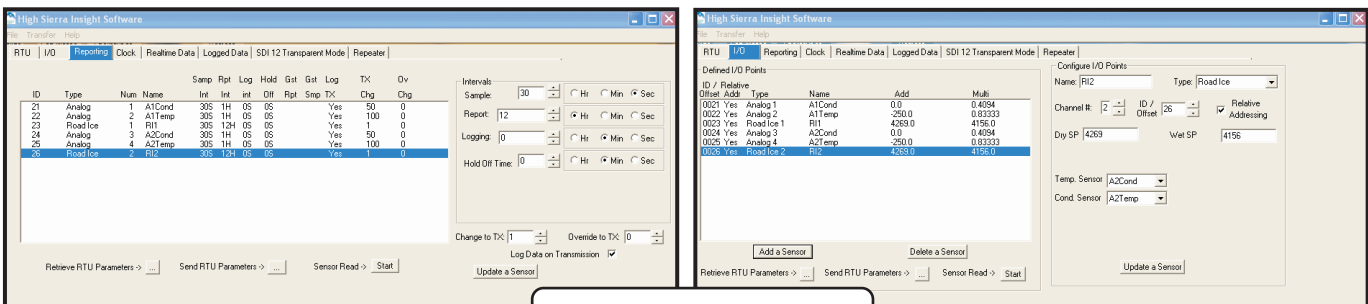
The High Sierra Electronics RWIS Road Sensor Station is an Environmental Sensor Station (ESS) that is NTCIP (National Transportation Communications for ITS Protocol) compliant, which simplifies integration with other field devices in an ITS Network.

Real-time anti-icing knowledge of the pavement surface state is necessary for making an informed decision on treatment and for message sign activation. The Model 5721-05 RWIS Road Sensor Station is an NTCIP compliant remote processing system for monitoring the actual road surface environment. It is well suited for roadways, ice-prone bridges, elevated roadways (including entryways, parking garage ramps or loading docks), and other commercial applications.

The primary use of the Model 5721-05 is for ice warning. It consists of a Signal Processing Module, a Road Surface Sensor, an optional Deep Road Temperature Sensor, and Signal Conditioning Modules. The processor derives the state of the roadway surface by observing temperature and moisture phase change on the surface. Deep Road Temperature is useful in predicting icing where roadway mass is affected (i.e. overpasses and elevated roadways). It can also serve as a guide as to whether de-icing chemicals remain on the surface, or if reapplication is necessary.

Conditioned pavement sensor signals are applied to the Signal Processor/Controller board, which samples conditions and determines the roadway state (Dry, Wet or IceWatch). This surface condition as well as surface temperature, deep pavement temperature and surface wetness are populated into the appropriate NTCIP 1204 (ESS) Object Identifiers (OIDs) and are transmitted when the device address is polled.

The surface sensor element, Model 5721-51, is molded in a resilient epoxy compound with thermal properties that closely match the roadway surface. It works on thermally passive principles: no artificial heating or cooling is used that may alter the measured environment. The maintenance free design features corrosive-resistant electrodes to derive the presence of moisture on the roadway surface.



IceSight Software
Screen Shots

02-5721-05-00(C)

ACCURACY YOU CAN COUNT ON

WEB SITE: www.highsierraelectronics.com E-MAIL: info@highsierraelectronics.com

MODEL 5721-05

Specifications and Ordering Guide



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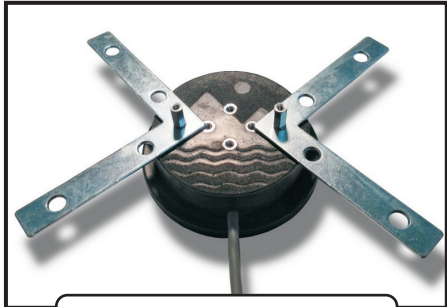
SPECIFICATIONS:

Model 5721-05 RWIS Road Sensor Station

Power.....	12VDC@ 130mA (<2 Watts) 110 VAC, <2 Watt (typical), AC Power Module is provided
Standby Battery	2.3 Amp Hour Rechargeable - Sealed Gel Cell
Operating Temperature	-40° C. to +60° C.
Temperature Range	-40° C. to +60° C.
Temperature Resolution	0.1° C.
Temperature Accuracy	0.2° C.
Surface Status	2 (error), 3 (dry), 5 (wet), 8 (ice watch)
Sensor Cable	50 Foot Standard Length (500 Feet Maximum)
Size	8.5" x 7" x 4.5" ABS NEMA 4X Enclosure
Weight	5.3 Pounds
Shipping Weight	7 Pounds

Controller

Data Format	NTCIP 1204v3 ESS
Protocol Stack	Data Objects - SNMP - Null - PMPP - RS232
Communications.....	Nine Pin D-SUB Connector, 9600 Baud



Model 5721-51
Passive Surface Sensor

ORDERING GUIDE:

Model 5721-05.....	RWIS Road Sensor Station (Includes Signal Processing Unit, Surface Sensor and Sub-Surface Sensor)
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OPTIONAL:

Model 5720-02.....	Extra Sensor Cable (1 foot Increments), factory only
Model 5721-51.....	Surface Sensor (Replacement)

02-5721-05(C)

Environmental Monitoring Solutions

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