

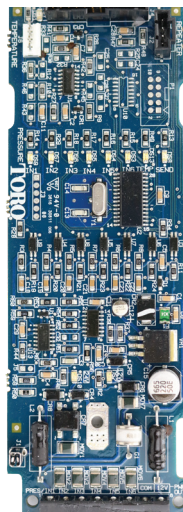
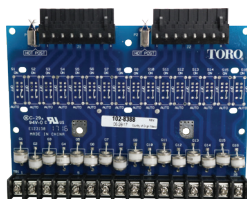
**TORO®**

# SENSOR INPUT KITS FOR SATELLITE CONTROLLERS

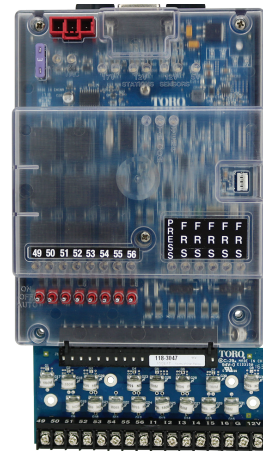


The Sensor Input Kits for Lynx Smart Satellite and Network VP deliver important field data to the superintendent's office. Relevant data is the foundation of informed decision making, whether the decision is made by a human or a computer. A satellite controller equipped with either of the two Sensor Input Kits can receive data from up to seven sensors. The satellite collects, stores, and delivers the data to Lynx, where it can be accessed by the superintendent on the Sensor Dashboard. Lynx also can respond automatically to changes to the irrigation system and changes in weather conditions. A Sensor Input Kit can help save the valuable resources of time and water, and help keep course conditions at their best.

## SENSOR INPUT KIT FOR NETWORK VP®

**118-5487SK***VP Timing Module – Sensor Compatible***VP-SEN-BRD-KIT**  
*Sensor Board  
& Terminal Board*

## SENSOR INPUT KIT FOR LYNX® SMART SATELLITE





## FEATURES & BENEFITS

### Lynx Sensor Dashboard Presents the Real-time Status of Sensors on the Course

At-a-glance understanding of the condition of the course irrigation system and weather inputs enhance decision-making.

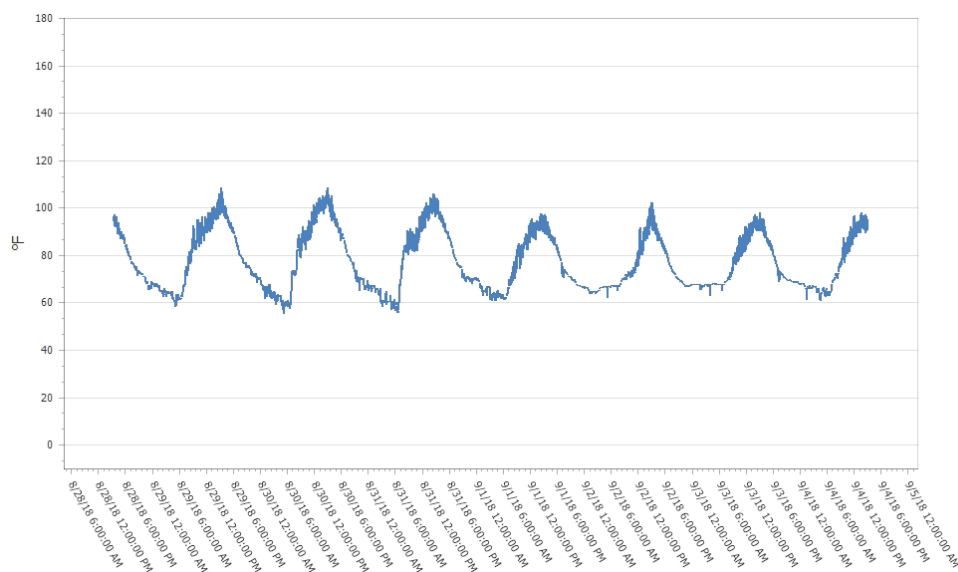


### Lynx Report Generator presents logged sensor data in tabular or graphical format

Display trends over time for a complete understanding of the weather and irrigation system.

#### Temperature : Section C - 1-3-Temperature

Generated At: 9/4/2018 3:33 PM  
Start Date: 8/28/2018 3:33 PM  
Span: 7 Day(s) 0 Hour(s) 0 Minute(s)







**Sensor alarms and responses can be easily configured in Lynx with numerous options for responses to alarm conditions.**

## **Automatically Safeguard Your Course, Eliminate Water Waste, and Ensure Efficient Irrigation**

### **Alarm & Response Examples:**

**Pressure Sensor:** Set alarm conditions and appropriate responses for high and/or low pressure values

- ✓ A text notification or email can be sent if measured pressure falls below a specified value.

**Rain Gauge:** Prevent, suspend or adjust irrigation in the event of a measurable rain event

- ✓ Lynx will account for measured rain on an hourly or daily basis and automatically apply a Rain Hold or adjust scheduled activity to account for the rain fall received.

**Temperature Gauge:** Set alarm conditions and appropriate responses for high and/or low air temperature

- ✓ Activate greens fans through a satellite switch output when air temperature exceeds the alarm value for a set duration
- ✓ Suspend irrigation when air temperature is near freezing.

**Switch Status:** Set alarm conditions and appropriate responses for changes in switch state

- ✓ Control pond or tank water level using level switches to trigger a pump or valve to transfer water, maintaining water level within a set range.

**Flow Meter:** Set alarm conditions and appropriate responses for high and/or low flow rate values

- ✓ A satellite switch can be closed if a flow out of tolerance is observed, signaling the pump station to shut down.



*Photo credit: Jeremy Klotz*

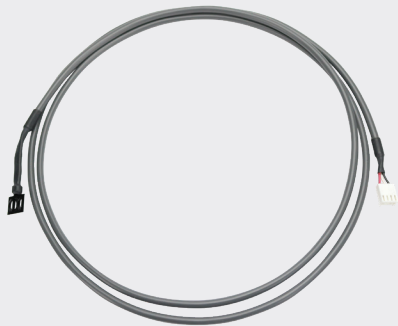
*A flow out-of-tolerance condition, manageable with a sensor input kit, flow meter, an automatic alarm response in Lynx®.*

## Toro Sensors



### Pressure Sensor

Approved Model:  
**PRESS200-SEN-KIT**  
Toro Pressure Sensor Kit: 0 – 200 PSI



### Temperature Sensor

Approved Model:  
**TEMP-SEN-KIT**  
Toro Temperature Sensor Kit

## SPECIFICATIONS

### Sensors

The Sensor Input Kits can accept up to seven sensors; they are compatible with the following sensors:

- (1) Pressure sensor
- (1) Temperature sensor
- (5) Flow meter, rain gauge, or switch status

Satellites equipped with Sensor Input Kits can accommodate up to 56 station outputs:

- The Sensor Input Kit for Network VP includes a sensor input board that takes the place of an eight station output board
- The Sensor Input Kit for Lynx Smart Satellite is a module that contains eight station outputs and seven sensor inputs. It takes the place of a sixteen station output board.
- Lynx version 5.0 or later is required for interaction with the Sensor Input Kits
- The Sensor Input Kit for Network VP includes a new Timing Module with faster processor, larger display, and expanded memory

### Sensor Input Kit for Network VP

Model: VP-SEN-BUNDLE

- 118-5487SK: VP Timing Module, Sensor compatible
- VP-SEN-BRD-KIT: Sensor Board and Level 4 Terminal Board

### Sensor Input Kit for Lynx Smart Satellite

Model: SMRT-SEN-BRD-KIT

### Toro Pressure Sensor Kit

Model: PRESS200-SEN-KIT

- 0 – 200 PSI
- 1/4" – 18 NPT male thread

### Toro Temperature Sensor Kit

Model: TEMP-SEN-KIT

Recommended accessory: Radiation Shield Davis #7714

### Rain Gauge

Recommended Model: Texas Electronics TR525I

### Flow Meter

Recommended Models: Data Industrial 200 Series or Bermad 900M Series, reed switch signal

## Recommended Sensors



### Radiation Shield for Temperature Sensor

Recommended Model:  
Davis #7714



### Rain Gauge – Tipping Bucket

Recommended Model:  
Texas Electronics TR 525I



### Flow Meter

Recommended Models:  
Data Industrial Series 200  
or Bermad 900 M Series