

# TRS&TWRS Wired & Wireless Rain Sensors

**RAIN & FREEZE SENSORS** 

Save up to 30%\* more water than existing disc rainsensors!





Introducing Toro Wireless
Rain Sensors and Toro Wireless
Rain and Freeze Sensors Sophisticated water-management
technology housed in a
dependable device that is
both easy to install and use.

Wireless Sensor Transmitt

#### RELIABILITY

TRS and TWRS Sensors are based on R&D Engineering's technology that boasts a global installation base. In addition to Toro's highly regarded innovation, the TRS/TWRS is backed by a five-year warranty

#### INNOVATION

All sensors are settable for universally Normally Open or Normally Closed operation for compatibility with just about all electric timers with or without sensor connections. Wireless models include a large LCD that displays signal strength, temperature (TWRFS only), low battery, and allows for easy programming like digital freeze sensor adjustments from 35°F to 45° F (TWRFS only).

#### **PRACTICALITY**

All sensors include maintenance-free sensing disks; adjustable rain sensitivity (1/8" to 3/4"). Easy-to-install Quick-Clip™ gutter bracket and pole mount/conduit adapter bracket are included standard.

Toro Wired Rain Sensors
Also offer a durable, costeffective wired rain sensing
solution designed to meet
the needs of most applications.

Wired Sensor



#### **SPECIFICATIONS**

# TRS&TWRS Wired & Wireless Rain Sensors

#### TWRS/TWRFS SPECIFICATIONS

- Operating temperature: -20°F to 120°F (-28.9° to 48.9° C)
- Housing material: Weather and UV resistant engineered polymer
- FCC, IC, ACA, UL, CUL, CE and C-tick approved
- Weight: 0.78 lbs (.353 g) (product & carton)

#### TRANSMITTER SPECIFICATIONS

- Transmitting range: up to 500' (152m) (line of sight)
- Sensor: maintenance free hygroscopic disks; adjustable rain sensitivity (1/8" to 3/4")
- Power: Two replaceable lithium cells (CR2032-3V)
- Dimensions: W= 1.75" (4.4cm) H= 3.5" (8.9cm) D= 1.75" (4.4cm)

#### TRS SPECIFICATIONS

- Normally Closed (factory set) or Normally Open (no tools required to change)
- Wire: 25 feet of white outdoor-rated UV-resistant cable
- Weight: 0.80 lbs (363 g) (product & carton)
- Dimensions: W= 1.75" (4.4cm) H= 3.5" (8.9cm) D= 1.75" (4.4cm)
- Rating 3 A, 24 VAC
- Operating temperature: -20°F to 120°F (-28.9° to 48.9° C)

#### **RECEIVER SPECIFICATIONS**

- Normally opened or normally closed;
   3A @ 24VAC
- Power source: 22-28 VAC/VDC, 100mA (from existing timer or optional transformer)
- Dimensions: W= 2.0" (5.1cm) H= 4.0" (10.2cm) D= 1.25" (3.2cm)



## ADJUSTABLE ANTENNA

Provides line of sight range of up to 500'.

#### B SMART BYPASS BUTTON

Provides fast system override.

### **G** LCD DISPLAY

Provides informative system feedback.

## D WATER CONSERVATION

Water conservation modes make saving water easy.

### SETUP/ ADJUST BUTTON

Simplifies programming.

## QUICK CLIP

Simplifies installation.

# RAINFALL ADJUSTABILITY

Adjustable from <sup>1</sup>/<sub>8</sub>" to <sup>3</sup>/<sub>4</sub>".

#### **FEATURES**

- Versatile mounting options one-piece
   Quick-Clip™ gutter bracket or ½"conduit adapter
- Universal Normally Open and Normally Closed operation for compatibility with just about all electric timers
- Maintenance-free sensing disks
- Selectable rain shut-off indexes at 1/8", 1/4", 1/2", and 3/4" (3, 6, 12, and 19mm) of rain
- Low-profile design and UV-resistant housing for sensor
- Wired model (TRS) includes 25 feet (7.6m) of white outdoor-rated, UV-resistant cable

#### Wireless Models (TWRS and TWRFS Only)

- Multi-Functional Receiver
  - Large LCD provides visual sensor status
  - Selectable water conservation modes (to delay resumption of irrigation by intelligently extending beyond mechanical reset time) can save up to 30%\* morewater
  - Smart Bypass™ allows for system override at any time and resets automatically
  - Low battery indicator
  - Signal strength indicator/scale
- Rain delay feature that works intelligently with the rain sensor (unlike most controllerbased rain delays)
- Fail-safe modes in the event of loss of communications or failed sensor
- Rain/Freeze combination features digital programmable accuracy – a first in the industry – The Freeze shutoff can be set from 35° F to 45° F in 2° increments
- Real-time outside temperature (°F or °C) displayed on the LCD (TWRFS only)
- Five year easy to replace, standard coin cell batteries
- Transmitting range up to 500' (152m)

#### **SPECIFYING INFORMATION**

Model	Description
TRS	Toro Wired Rain Sensor
TWRS	Toro Wireless Rain Sensor
TWRFS	Toro Wireless Rain/Freeze Sensor

#### www.toro.com