# **Field Facts for Farmers**

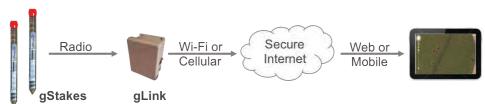
What's measured improves



gStakes: Remote field sensors for growers to monitor soil & environment conditions



# **Know the Precise Condition of Your Fields - Instantly**



Optimize irrigation, reduce fertilizer use and optimize timing, know when frost is in the air. More control, improved ROI.

The gThrive system consists of sensing gStakes and a gLink controller that transmits data to you over the Internet in real-time. The stakes may stay in the ground all year reporting on moisture, fertilization, soil and air temperature and sunlight. You can view the complete picture for all of your monitoring points wherever you are, on your computer or phone, and get alerts in plain language when trouble looms.

Individual gStake results are easily viewed on-screen, including the location of each on an intuitive aerial view powered by Google Maps. The status of each stake is indicated using color coding: green for all OK, yellow for a value that was out of range during the selected time range, and red for one that is out of range now.

The system is the **simplest available to install** and operate, but that doesn't mean it lacks sophistication - from the high accuracy sensors to the intensive cloud-based computation going on in the background, we use the latest technology to give you actionable information.







"Irrigation today is like heating a house without a thermostat."

### **Questions?**

Question	Answer
Why would I want one of these systems?	By knowing what's going on under the soil, you're better able to control the amount of water you use, fertilizer you add, and the effectiveness of your plans. Ultimately this minimizes costs and maximizes product quality and yield
Is it complicated?	The robust polycarbonate gStakes make all the measurements, talk to each other, and send data back to the gLink control box – everything autoconfigures, it's very simple
Do I have to have it professionally installed?	Place the gStakes in the ground, find somewhere within 1,500' to site the gLink control box (which can be solar powered) – no wires, no hassle
What if I want to change things around later?	Just move gStakes to a different location – the system keeps track
I only have a small farm – is gThrive for me?	The system is easily scalable from a few acres to a square mile, and can be expanded at any time
Can I get detailed data on my crop's health?	If you want lots of data, you can see it, but most growers just want to know what the issues are, the rest is up to your expertise
Is it expensive?	Despite all the sophisticated features, the system costs remarkably little – accelerating your Return on Investment (ROI)

gStake Product Overview Page 2

# **Anatomy of a gStake System**

#### **Independent operation**

Each gStake communicates with the others, forming a networked group - easy to install, easy to reconfigure, no wires. They link to a gLink controller up to 1,500' away, and operate on their own battery, guaranteed for 3 years

### **Comprehensive Sensing**

Packed with technology, the gStake sensors measure:

- Soil moisture
- Soil EC (fertilization)
- Soil temperature
- Air temperature
- Sunlight

### **Anywhere Insight**

Wherever you are, you have instant access to the information you need. Get a simple overview of alerts or dig down to the underlying detailed data, it's all at your fingertips

#### **Accelerated ROI**

Ultimately it's about increasing your bottom line. gThrive Systems pay for themselves quickly - typically in less than a year and often in a few months

- Save energy
- Save fertilizer
- Save water
- Save labor
- Increase yields

#### **Installable Yourself**

Find a suitable place to site the gLink controller (it's available with solar power for ultimate installation flexibility); then push the gStakes into the ground (use a 3/4" auger for hardpack)



Page 3 gStake Product Overview

## **Technical Specifications**

#### gStake

- Sample depth: 5-12" (13-30cm)
- Sample rate:
  - 10 samples/hour continuous
- Range: ~1500'/500m to other gStakes & gLink
- Communication: ISM band radio
- Operating temperature:
  -4° to 176°F (-20° to 80°C)
- Internal battery guaranteed for 3 years
- Measurements:
  - Sunlight
  - Air Temperature
  - Soil Temperature
  - Soil Moisture
  - Soil Electrical Conductivity

#### gLink

- 120V AC or optionally solar powered
- 9.5x11.5x5.5" (w/h/d) NEMA Box (24x29x14cm)
- Pole or wall mounted
- Uplink
  - USB Cellular modem or
  - Wi-Fi 802.11n
- 1500' (500m) to nearest gStakes

#### Software

- Web based, or mobile application on Android operating system
- Easy-view icons and text-based alerts for out-of-range parameters
- History, map-view, ability to drilldown to underlying data when desired

### **Ordering**

#### **Basic Kit**

gLink, 4 gStakes Order code: gTk1-pi

p = gLink power source.

Select:

'M' for 120V mains power 'S' for solar power

i = gLink communication interface.

Select:

'W' for WiFi

'C' for Cellular

For example: gTk1-MC

### **Additional gStakes**

Order code: gTs-#

# = Select desired number



"Irrigators irrigate; given enough water, they will always over irrigate."

Copyright © gThrive, 2014 Data subject to change info@gthrive.com www.gthrive.com GTBREN 25th-Jan-14

