Green Stream

Quotation Q01445

Date: 06/16/2026

Due date:

Customer: Polk County

Reference: GRANT sensor draft

Delivery terms:

Vendor: Green Stream Technologies, Inc.

Address: 12339 Wake Union Church Road
Suite 104
Wake Forest NC 27587
United States

Phone: +1 (844) 499-8880

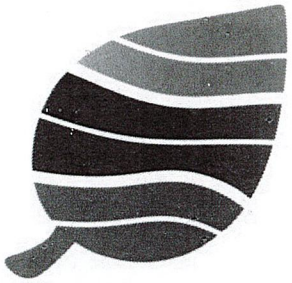
Website: www.greenstream.com

E-mail: accounting@greenstream.com

Tax/VAT number: 82-1005293

	Part #	Part description	Quantity	Price per UoM	Subtotal	Tax
1	01-100 TS30-IMT	KIT Water Level TS30-IMT 5 water level sensors with satellite service	5 Each	USD 3,560.00	USD 17,800.00	
2	01-052 MA-Con-8	Mount Concrete Drill-in, 8 ft Mast for water level sensors	5 Each	USD 490.00	USD 2,450.00	
3	01-052 MA-ARM-U	Mount Arm Assembly, for ultrasonic for water level sensors	5 Each	USD 155.00	USD 775.00	
4	02-010 SV-INS	Field Service Installation 5 installations: $1500 Mileage: 550 miles - $550 Travel time: 8 hours - $2000 Hotel: $250 MIE: $70	1 Each	USD 3,420.00	USD 3,420.00	
5	02-050 TRAFNIGHT	Traffic Control Traffic control services may be needed. or the county may be able to manage the traffic control.	1 Each	USD 1,500.00	USD 1,500.00	
6	02-050 SURV	Elevation Survey NCEM may be willing to do the elevation surveys	5 Each	USD 1,500.00	USD 7,500.00	

		free of charge in which case this can be removed.			
7	02-020 ENG-AWS-SETUP 1 VDEM	Cloud Tier 1, One Time Setup, VDEM	1 Each	USD 265.00	USD 265.00
8	03 SUB-AWS 1	Cloud Tier 1, Annual Platform Fee Yearly	1 Each	USD 990.00	USD 990.00
9	03 SUB-ISBD 1	Cloud Tier 1, Iridium 15 Min Report Rate Yearly	5 Per Device	USD 1,200.00	USD 6,000.00
10	03 SUB-CONT 1	Cloud Tier 1 Contrail Yearly	5 Per Device	USD 32.00	USD 160.00
11	04 SUB-MAI 2	Maintenance Plan 2 This is our Tier 2 maintenance plan that includes an annual maintenance visit. Incidental repairs are charged at a reduced rate 5 devices @ 479 = $2395 Mileage: 550 miles - $550 Travel time: 8 hours - $2000 Hotel: $250 M/E: $70	1 Per Device	USD 5,265.00	USD 5,265.00
	Total:				USD 46,125.00



Green Stream

Products and Services

Green Stream Technologies, Inc.

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INTRODUCTION

Green Stream is an environmental IoT company providing complete flood and weather monitoring systems—from sensors to communications to cloud software and field services.

Our systems deliver real-time, actionable data on water levels and weather conditions, enabling emergency managers, public works teams, and researchers to make informed decisions that protect infrastructure and public safety.

SYSTEM OVERVIEW

Green Stream delivers a fully integrated solution.

SENSORS	TELEMETRY	CLOUD PLATFORM	FIELD SERVICES
• Water level • Precipitation • Weather	• CORBO™ environmental telemetry platform • Autonomous power: battery + solar • Reliable communications: multi-carrier LTE or Iridium satellite • Ruggedized for tough weather • Mount solutions	• Secure SOC-2 platform • Processing and storage • Real-time dashboard for situational awareness • Device & network health monitoring • Alerts & notifications • Report intervals 5 or 15 minutes • APIs • Integrations	• Site studies • Installation • Elevation survey • Traffic control • Project coordination • Technician training • Stakeholder training • Virtual support

SENSORS

Green Stream supports a range of environmental sensors to monitor flooding and early warning conditions leading to flooding. All sensors work with the CORBO Environmental Transceiver.

WATER LEVEL	PRECIPITATION	WEATHER
• Non-contact ultrasonic and radar sensors • Mounted above waterways (bridges, docks, posts) • Range options from 20 ft to 98 ft depending on site conditions	• Radar-based disdrometer (no moving parts) • Measures intensity, accumulation, and precipitation type	• Wind speed and direction • Temperature, humidity, barometric pressure • Integrated precipitation measurement

Water Level Sensors

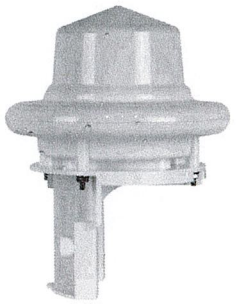
Green Stream utilizes non-contact sensors to measure water levels of streams, rivers, lakes, reservoirs. Non-contact sensors are mounted perpendicularly above the area to be monitored (typically from a bridge, culvert, dock, or pier). They measure the distance from the sensor to the surface below by sending out a pulse and measuring the amount of time it takes for the pulse to bounce back. A simple mathematical calculation converts the distance reading into a water level value. Green Stream offers a variety of sensor models, all of which are compatible with its system.

Water Level Sensors

Model	Short Range 20'	Medium Range 33'	Long Range 65'	Longest Range 98'
				
Sensor Model	**ToughSonic TS30**	**ToughSonic TS50**	**VEGAPULS C21**	**VEGAPULS C23**
Type	ultrasonic	ultrasonic	radar	radar
Range	0.8 - 20 ft	1 - 33 ft	1 - 65 ft	1 - 98 ft
Battery Voltage	12-24V	12-24V	12-35V	12-35V
Weight	1.2 lbs	1.4 lbs	1.5 lbs	1.5 lbs
IP rating	IP68	IP68	IP68	IP68
Appli-cations	Docks, culverts, low bridges	Medium height bridges	Higher bridges, sites with interference: wind, waves, noise, mist, some vegetation	Very high bridges, sites with interference: wind, waves, noise, mist, some vegetation

Precipitation Sensor

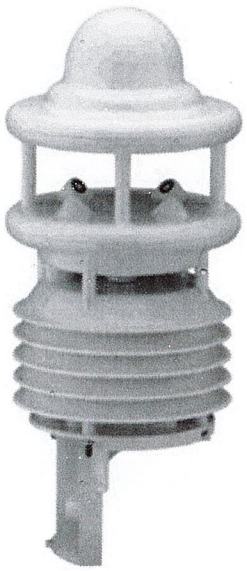
The Lufft WS-100 is a radar-based disdrometer. It has no moving parts and requires far less maintenance than a traditional tipping bucket rain gauge. It measures not only the intensity and accumulation of precipitation, but can also indicate the type of precipitation that is falling.



Sensor Model	**Lufft WS-100**
Type	24GHz doppler radar
Heating	included
Types of precip detected	Rain, snow, sleet, freezing rain, hail, drizzle
Measurements returned	Precipitation intensity up to 200mm/hr Droplet size 0.3 to 5mm Particle velocity up to 15.5 m/s Solid precipitation 5.1 to 30mm
Power needs	1.5mA standby, 15mA in operation, 750mA when heater is on
Resolution	0.01 / 0.1 / 0.2 / 0.5 / 1.0mm
Accuracy	0.16mm or 10% of measured value up to 200mm/hr
Weight	1.35 lbs
IP Rating	IP66

Weather Station

The Lufft WS-600 provides atmospheric data such as wind speed and direction, temperature, humidity, and barometric pressure. It also features integrated precipitation measurement.



Sensor Model	**Lufft WS-600**
Type	Ultrasonic/Wind, NTC/T, Capacitive/RH, MEMS capacitive/Pressure, 24 GHz Doppler radar/Precipitation
Heating	included
Types of precip detected	Rain, snow, sleet, freezing rain, hail, drizzle
Measurements returned	All precipitation plus wind speed and direction, relative humidity, air temperature, barometric pressure
Power needs	1.5mA standby, 15mA in operation, 750mA when heater is on
Resolution	0.01 / 0.1 / 0.2 / 0.5 / 1.0mm
Accuracy	0.16mm or 10% of measured value up to 200mm/hr
Weight	1.35 lbs
IP Rating	IP66

TELEMETRY

At the core of every environmental monitoring station is Green Stream's Corbo™ environmental transceiver. The Corbo is a rugged telemetry and power platform that:

- Powers and regulates connected sensors
- Collects and processes environmental data
- Transmits data to the cloud
- Supports two-way communication, configuration, and OTA updates

Reporting intervals are user-defined, typically ranging from 5 minutes to 15 minutes depending on application.

Corbo™ Platform Capabilities

- Proprietary Green Stream electronics (modular architecture)
- Two-way communications (command, configuration, OTA updates)
- User-defined reporting intervals (as frequent as every 5 minutes)
- Sensor power management and regulation
- Device health monitoring
- Autonomous solar-powered operation
- Designed for unattended outdoor deployment
- Ruggedized, tamper-resistant enclosure with NEMA4 and IP68 ratings

Communications Options

Corbo is available in multiple communication configurations to match site conditions.

Corbo LTE (Cellular)

- Multi-carrier LTE Cat M1 (AT&T, Verizon, T-Mobile)
- Automatic carrier failover via eSIM
- Best for areas with reliable cellular coverage
- Smaller power consumption and enclosure footprint

Corbo Iridium (Satellite)

- Global Iridium satellite communications
- Best for remote or low-connectivity environments

Power System

All Corbo systems are designed for autonomous field operation:

- Primary power: onboard rechargeable 12V battery.
    - Field-replaceable batteries
    - Lifespan 2–5 years depending on usage
- Charging: external 20W-35W 12V solar panel (continuous daytime charging)
- Integrated charge control and low-power optimization

Mount Solutions

Green Stream offers standardized mount solutions that adapt to different types of bridge railing, culverts, dock pilings, piers, or fenceposts. All mounts are made of materials appropriate for outdoor weather and coastal environments.

CLOUD SERVICES

Cloud Services include Green Stream's SaaS Platform, communication, and data services. Integrations and enhancements are also available upon request.

Platform

Green Stream hosts sensor data on its secure AWS Cloud Platform.

- Provides real-time telemetry ingestion, processing, storage and access
- Two-way communication for remote configuration and control of edge devices: firmware and security updates, bug fixes, features and optimizations from the cloud
- Secure: SOC-2 Type II certified infrastructure and processes, with annual security audit and penetration test, based on NIST 800-53 security framework
- Data visualization: Includes intuitive real-time dashboard for time series data access and visualization, constantly monitor network and conditions in the field. Includes historical graphs and data download. Simple and easy to read for operational personnel
- API: real-time data fed to SECOORA's scientific platform
- Optional integrations
    - NWS integration: direct to NWS via the federal SHEF code system
    - Contrail integration: API to AEM's Contrail platform
- Features in development (2026)
    - Network management console for site configuration, fleet oversight and maintenance
    - Custom notifications and alerts
    - Variable report rates

Communications

Green Stream provides real-time, near zero latency, encrypted, end-to-end communications from monitoring stations to the cloud platform.

Cloud Service Plans

Plan	Tier 1: Basic	Tier 2: Pro	Tier 3: Enterprise
Dashboard and Console	Basic features	Enhanced Features	Full features plus priority service support
Instance	Pooled	Pooled	Private, with community hosting capability
Security	Basic	Basic	Enhanced, with compliance and performance reporting
Create and manage user accounts	Up to 3 users	Up to 7 users	Up to 15 users
Alerts by text, email	Up to 5 recipients	Up to 15 recipients	Up to 50 recipients
Online data storage	Up to 3 months	Up to 6 months	Up to 12 months
Deep storage	Up to 10 GB	Up to 200 GB	Up to 1 TB
Communications	LTE or Iridium	LTE or Iridium	LTE, Iridium or GOES
Integration Options	n/a	NWS, Contrail	NWS, Contrail
Training Options	n/a	On request	On request
Customization Options	n/a	On request	On request

FIELD SERVICES AND SUPPORT

Green Stream provides on-site services in Virginia, North Carolina, and South Carolina. Green Stream will provide instructions and advice for customers outside of its service area.

Pre-Installation and Site Evaluation

Since gauge performance is impacted by environmental factors, strategic siting of a gauge is critical before deployment. A Green Stream technician will visit each of the flood gauging sites proposed by the Customer and complete a 6-point site evaluation to determine the site's viability and ideal orientation of equipment. We assess:

1. Sensor needs & viability
2. Solar exposure
3. Signal strength, quality & carrier
4. Structure on which sensor is to be installed and mount hardware needs
5. Safety concerns at site, e.g. need for traffic control
6. Susceptibility to environmental damage or obstruction

Permitting Support

Green Stream provides support documentation and drawings for permit applications.

Installation

Green Stream provides professional installation services within its service area. Alternatively, we can guide you or your contractor to conduct installation.

Traffic Control

If traffic control is needed, Green Stream can organize with a qualified subcontractor.

Elevation Survey

An elevation survey is typically taken following installation of a sensor to determine the NAVD88 elevation of the sensor needed to report the elevation of the water. If needed, Green Stream can organize with a local qualified land surveyor.

Project Coordination

For larger projects, Green Stream takes care of project coordination, leads implementation, and keeps you informed of progress.

Warranty

Green Stream offers a one-year warranty against defects for equipment of its own manufacture. The original manufacturer's warranty applies for all third party equipment.

Maintenance Plans

Green Stream offers maintenance plans to fit every budget, from DIY and pay-as-you-go repairs to full service.

Plan	Tier 1: DIY	Tier 2: Assisted	Tier 3: Full Service
Best if	*You have a skilled technician team*	*You have staff with some technical skills*	*Gauge network is mission-critical and uptime performance is important*
Gauge network performance monitoring	DIY	DIY	Green Stream, target 95% network uptime
Annual preventative maintenance visit	DIY	Green Stream technician	Green Stream technician
In case of outage or data errors	DIY Green Stream will assist at reduced cost if needed	Troubleshoot first. Green Stream will assist at reduced cost if needed	Green Stream will investigate and repair outages/errors.
Technical Support	Documentation 5-day email response	Documentation, plus remote support 3-day email response	Documentation, support tickets and ticket tracking Same day email and phone response

CONTACT US

Contact us to discuss your environmental monitoring project, and get a quote for the solution that fits your needs.

Green Stream Technologies, Inc.

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ESTIMATE

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info@ddi.eco
+1 (828) 683-1566
www.ddi.eco

Bill to
Bobby Arledge
Polk County Emergency Management
40 Courthouse St.
PO Box 308
Columbus, NC 28722

Estimate details
Estimate no.: 26119
Estimate date: 06/23/2026

#	Product or service	Description	Qty	Rate	Amount
1.	**Stream Gauge Station (Radar)**	Cellular, Installed, and reporting to State Contrail	5	$15,470.00	$77,350.00
2.	**Rain Gauge Station**	Add-on to # 1 Above	2	$2,125.00	$4,250.00

Subtotal	$81,600.00
Sales tax	$5,712.00
Total	**$87,312.00**

Accepted date

Accepted by

Pos.	Item no./Description	Quantity	Unit of Measure	Price/each	Total
1	MON11_BTBRGS13001TXX TB3/0.01/T - TB3 SYPHONIC RAIN GAUGE 0.01 INCH WITH TEFLON IMPREGNATED POLYMER BUCKET	5.00	Piece	1,265.00	6,325.00
2	MON31_BHQUNTEDGEL20X HyQuant Edge L20 Radar Level Sensor LTE-M/NB-IoT Base Unit HyQuant Edge HyQuant Edge L20 Radar Water Level Monitoring System - 60 GHz radar water level sensor - Water level measurement range: 0.1 m ... 20 m - With integrated logger and IP modem - Logger memory: 4 GB - Communication and interfaces: LTE Cat-M1, NB-IoT, Wi-Fi - Protocols: MQTTS, HTTPS, SFTP (TLS-secured) - 10 m cable, mounting bracket, torx, Wi-Fi activation magnet - FAT document and Quick Installation Guide	3.00	Piece	2,758.00	8,274.00
3	MON23_SMATRSC071X21X SC071-21 - BATTERY LITHIUM 18650 SIZE 2900mAh 3.6V protected Type18650,min 2900 mAh, protected,button top style Requires that Customer provides 6x 3.6 V DC - 2900 ... 3800 mAh; all 6 LI cells must have the same capacity! Type 18560 type selection: • circuit protection: protected • battery version: button top	3.00	Piece	34.00	102.00
4	MON21_BIR35S11IR0000 iRIS 350 FX SAT - Data Logger w/ Iridium Satellite Modem Base Unit iRIS iRIS 350FX Wireless IP Data Logger - Model: Iridium Satellite - local comms: serial RS-232 - I/O: 4x analog (16 bit) in, 2x digital I/O, 2x digital in, 1x analogue excitation out, SDI-12 - Modbus RTU - housing: powder-coated die cast aluminium, IP65 - op.temp. range: -40...+70 °C NOT INCLUDED: Iridium card, antenna, int. battery, recurring Iridium transmission costs.	2.00	Piece	4,278.00	8,556.00
5	MON23_SMATRSC043X296 SC043-296 - 6M Iridium satellite antenna cable	2.00	Piece	500.00	1,000.00
6	MON21_SMATRSCMIS8033 COMP-MISC-8033 IRIDIUM 9602	2.00	Piece	10,200.00	20,400.00
7	MON31_SGPCSS1H4201XX HS40S201 - MILD STEEL HS40 ENCLOSURE PAINTED FULL GLOSS OYSTER RAL7035W 1.6MM THICK REV.2	2.00	Piece	8,250.00	16,500.00
8	MON31_BWTRLEVGAXXXXX MON31-GenArt - WTR LVL 3rd Party Component (project) GenArt MON31 Installation and field services for 5 cell and satellite sites. would include traffic control if needed	5.00	Piece	9,675.00	48,375.00

Total USD	**109,532.00**

Payment Terms 10 days net

All prices are exclusive of the statutory value added tax at the time of invoicing.

Quote valid until 7/25/2026

Delivery only with extended and expanded retention of title.

Please note that minor rounding differences may occur between the unit price and the total sales price due to system-based calculations using five decimal places.

Shipping = FOB Lake Worth, FL