Solar Light Towers

Unprecedented power-efficiency ensures longer runtime with the brightest illumination and the least energy consumption.

# Touchscreen Control

for Programmable Solar Light Towers

- Exceptional programmability
- Automatic and manual operating modes
- Simple on/off controls
- Full-color 7-inch touchscreen controller
- Multilevel security

Wanco's Programmable Solar Light Towers provide you with the flexibility and versatility of fully automated operation or manual control. Set programs to run automatically, or turn lights on and off with a single "Quick Select" button.

Lights can be individually programmed for manual or automatic operation and any of ten brightness levels. Configure each light individually or all four together with the 7-inch touchscreen controller.

Controller Main Screen
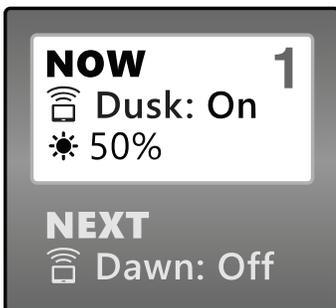
Status at a glance

View light status on the controller's Main Screen, including current and future on/off states and brightness for each light.

Quick and easy on/off control

Quick Buttons on the Main Screen turn all lights on (from dusk to dawn) and off (instantly).

Multiple security levels

Secure the lights from changes with multiple logins, or allow unrestricted access by disabling passwords altogether.

System settings

View system information and manage settings such as time and date, light tower location and connected devices.

Advanced Light Settings

Manual or automatic

Select the best operating mode for your application to turn lights on and off with manual, timer and sensor control.

Ten brightness levels from 10 to 100%

Lights are dimmable for every "on" condition, whether setting a program or switching lights on manually. Set brightness independently for each light.

Select lights to control

Link all lights for simultaneous operation or unlink them for controlling just one—or two, or three in any combination.

| 50% | 50% |
| 50% | 50% |

| 1 50% | 2 90% |
| 3 Off | 4 Off |

Brightness: 90%
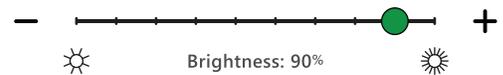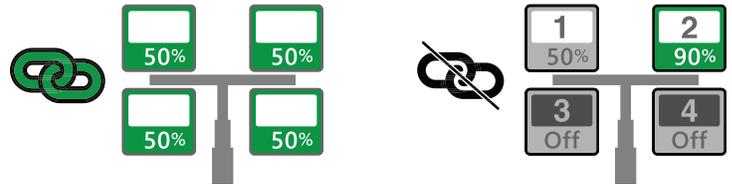
Program 1 : On	View	Edit
Program 2 : None	View	Create
Program 3 : None	View	Create

Multiple independent programs

Create up to three separate programs, which can be independently configured and activated.

S M T W T F S

Flexible scheduling

Choose to run a program every day or on selected days. The built-in calendars let you set start and end dates for each program, or choose specific dates you want it to run.
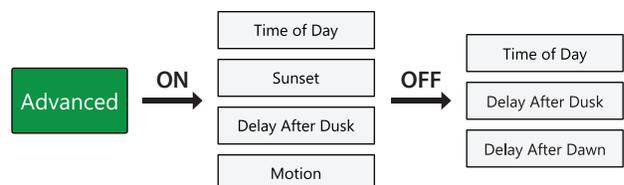
| Dusk | Dawn |

Dusk-to-dawn default

Automatic operation is set for dusk to dawn by default. The system uses a photocell sensor to trigger the lights.

Lights on . . . lights off

Lights turn on at

17 : 30
hrs   mins

Advanced settings give you options for automatically turning on the lights at a specific time of day, at sunset, from 15 minutes to 2 hours after dusk, or based on motion detection.*

Similar settings automatically turn the lights off. Mix and match on and off settings as needed.

Advanced

ON
- Time of Day
- Sunset
- Delay After Dusk
- Motion

OFF
- Time of Day
- Delay After Dusk
- Delay After Dawn

*Motion detection requires installation of optional equipment.

Power Management

for Programmable Solar Light Towers

- True battery state-of-charge
- Convenient time remaining feature
- Remote power monitoring & management
- Bluetooth® app for local remote control
- Extensive performance history

Wanco's Programmable Solar Light Towers offer a number of choices for power system monitoring and management, with both local and remote options ranging from simple to sophisticated.

A full-featured smartphone app uses a local Bluetooth® connection and is included with all programmable solar light tower models, both solar-only and hybrid. Remote monitoring and control uses cellular access, is included with hybrid models and is optional for solar-only models.*

## Local Monitoring & Control

Battery monitor

For solar-only models, a battery monitor on the control panel is standard. It gives local access for viewing the most useful power information in real-time.
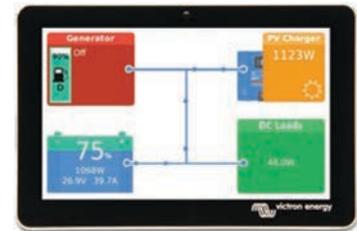
Power controller

Hybrid models include an advanced touchscreen controller that provides access to all power performance information and power system controls. The touchscreen is an optional upgrade for solar-only programmable models.

Remote Monitoring & Control
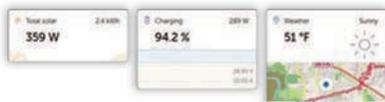
Deluxe power management

The Deluxe package* provides a real-time look at power performance, allowing you to monitor, manage and optimize the power system remotely. Use live and historical data to make informed decisions and adjust the light tower operation. Set alerts and alarms to catch potential issues early. This package is standard on hybrid models, and optional for solar-only programmable models.

Basic power management

The Basic package* provides a snapshot view of the same power data and performance history as the Deluxe package provides. The system connects briefly and uploads data to the cloud at 15-minute intervals, as the Basic package does not provide live data. This package is optional for solar-only programmable models.

Bluetooth app

The remote power management app for smartphones provides the same functions as the Deluxe package. It connects only within Bluetooth range of the light tower. The app is free and connects with all programmable solar light tower models.

*Remote access includes a 5-year cellular service plan. Contact factory for other cellular plans.

Energy Demand

Charts represent dusk-to-dawn operation, 7 days a week

Wanco Programmable Solar Light Towers use state-of-the-art Smart MPPT solar controllers along with monocrystalline half-cut cell solar panels for increased power yield. The Wanco Small Solar Light Tower uses traditional solar technology. As a result, the programmable models are significantly more energy efficient.

When solar yield is greater than the energy demand from the lights, autonomous operation is possible. When the demand exceeds the solar yield, external charging may be required.

Hybrid solar models do not require external charging. If battery power is depleted while the light tower is operating, diesel backup power automatically charges the batteries, ensuring continuous operation.

The charts shown below are representative of dusk-to-dawn operation, seven days a week. Charts for your application and location are available from the factory.
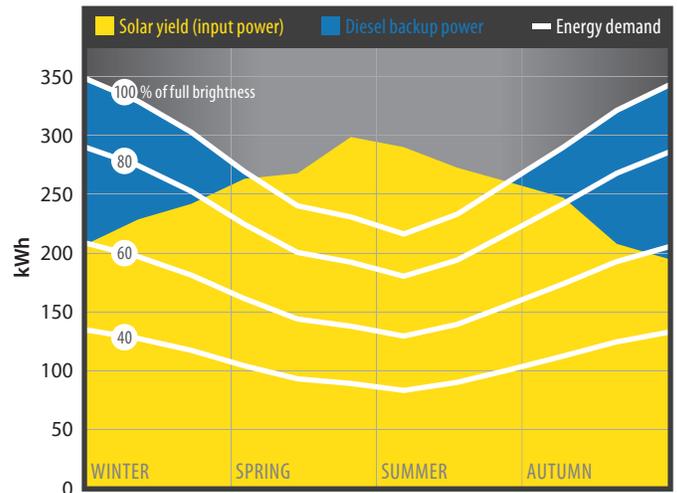
Programmable Solar Light Towers
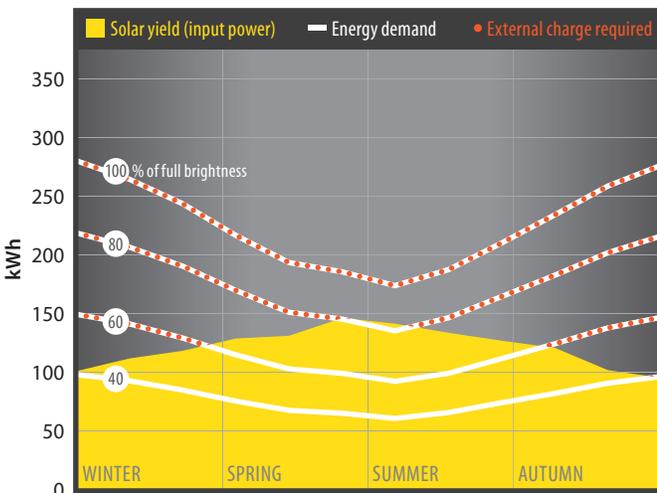**1600-watt solar, four 200-watt dimmable lights**
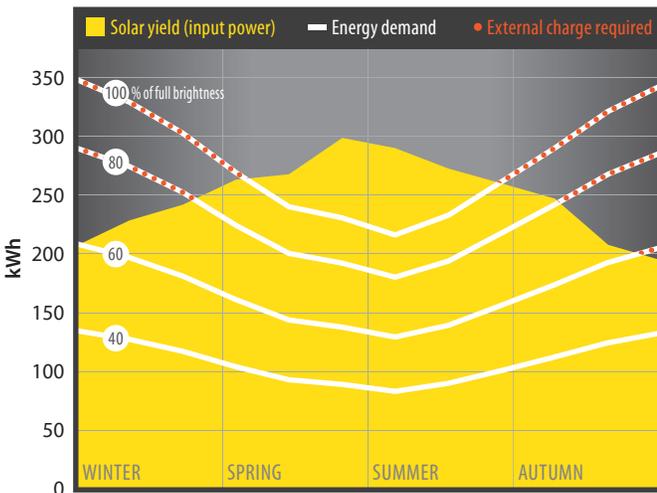
Programmable Hybrid Solar Light Towers
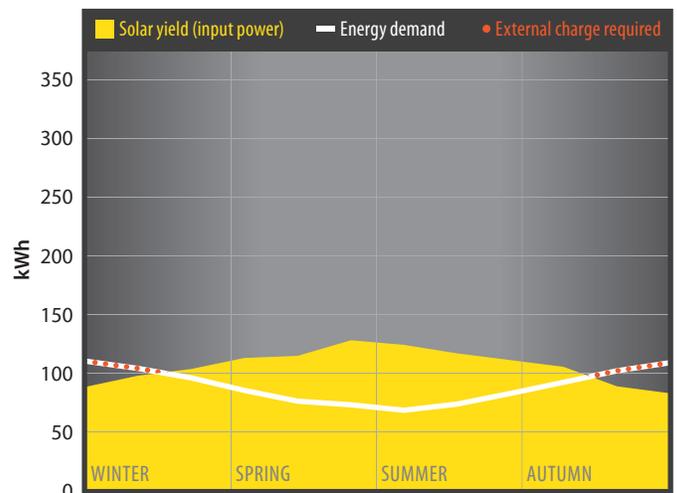**1600-watt solar with diesel backup, four 200-watt dimmable lights**

Programmable Solar Light Towers
800-watt solar, four 160-watt dimmable lights

Small Solar Light Tower
730-watt solar, four 60-watt non-dimmable lights

Programmable Solar Light Towers

- Dimmable LED lights on 24-foot tower
- Unprecedented power efficiency
- Two models provide 1,600 or 800 watts of solar
- Smart MPPT solar charge controller
- Optional remote power management systems

Wanco's Programmable Solar Light Towers feature outstanding power efficiency for reliable performance and long run time. Ultra-bright LED lights can be individually programmed for automatic operation and desired brightness from 10 to 100 percent. A 7-inch full-color touchscreen controller enables highly customizable autonomous operation and makes manual operation easy.

Four high-efficiency, high-output light fixtures top the 24-foot telescoping tower. The tower rotates nearly 360 degrees without lowering the lights, which operate at any height. The lights can be individually aimed without the use of tools, and they stay where you point them. The tower remains vertical at all times, and the trailer's low center of gravity keeps the tower stable.

Batteries provide power, and an automated solar-based charging system keeps the batteries charged. The system's Smart MPPT controller provides up to 30% more charging capacity, maximizing every available amp for optimal charging efficiency.

Brief specifications

	1600 W model	800 W model
Lights	Four dimmable LED fixtures	Four dimmable LED fixtures
Luminous flux, lumens	Fixture Total	Fixture Total
100% brightness	32,045 128,180	23,232 92,928
50% brightness	16,022 64,088	12,818 51,272
Coverage area*	26,510 sq ft (2460 m²) 0.6086 acres	21,325 sq ft (1980 m²) 0.4895 acres
Power draw	200 watts per light fixture	160 watts per light fixture
Light height	24 ft (7.3 m)	24 ft (7.3 m)
Batteries	Eight 4D AGM 12 Vdc batteries, wired as a 24-volt system	Four 4D AGM 12 Vdc batteries wired as a 24-volt system
Battery capacity	800 Ah total	400 Ah total
Solar	1600 W	800 W
AC charger	50 A	50 A
Deployed footprint, L × W	180 × 164 in (457 × 417 cm)	175 × 85 in (445 × 215 cm)
Travel height	9 ft (2.72 m)	9 ft (2.72 m)
Weight, approx.	2900 lb (1315 kg)	2100 lb (953 kg)

Options

30-foot tower with electric winch

Remote power management system

Asset Tracker for GPS location
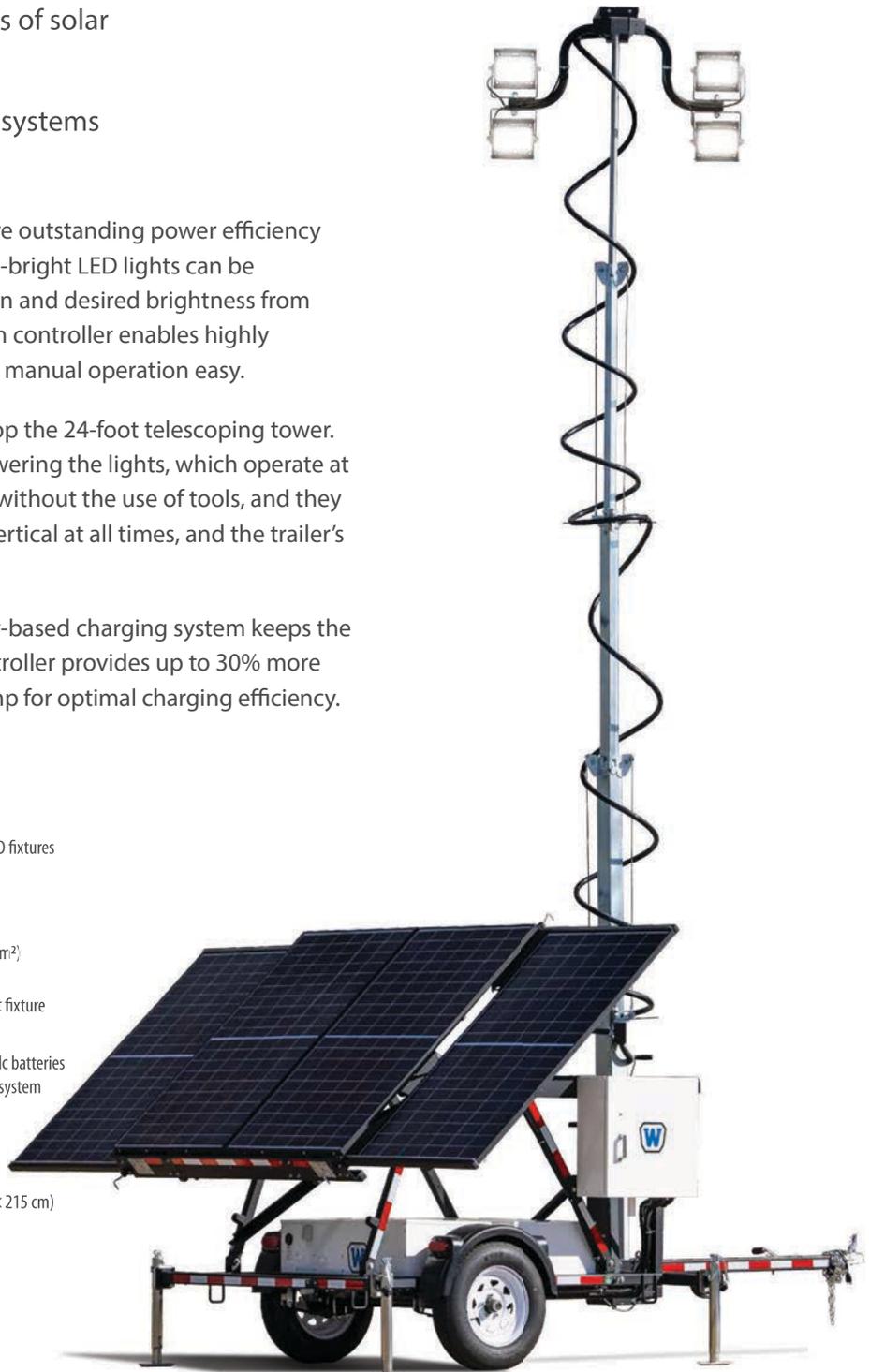
Programmable Solar Light Tower, 1600-watt
Model WLTS-M-1600

*Total coverage ≥ 0.5 fc with lights at 24 feet and 100% brightness, fixtures tilted down 15° from vertical. For coverage with optional 30 foot tower, visit wanco.com.

Programmable Hybrid Solar Light Tower

- Unprecedented power efficiency
- Sound-attenuated diesel backup power
- Smart MPPT solar charge controller
- Deluxe remote power management system
- Remote control of lights on/off

Wanco's Hybrid Solar Light Tower adds backup power to the extensive list of features provided by our solar-only light towers. A diesel engine charges the batteries when needed, for seasons and locations with limited sunlight. The engine runs automatically to keep the batteries fully charged. Environmental features include sound-attenuated enclosure and exhaust, and integrated fluid containment.

The system features a 7-inch full-color touchscreen controller for the lights, and a second controller specifically for power management. Wanco's deluxe remote power monitoring and management package is also included.

Four high-efficiency, ultra-bright LED light fixtures top the 24-foot telescoping tower. The lights can be individually programmed for manual or automatic operation and desired brightness from 10 to 100 percent. The touchscreen controller enables highly customizable autonomous operation and also makes manual operation easy.

Brief specifications

Lights	Four dimmable LED light fixtures	
Luminous flux, lumens	Fixture	Total
100% brightness	32,045	128,180
50% brightness	16,022	64,088
Coverage area*	26,510 sq ft (2460 m²)	
	0.6086 acres	
Power draw	200 watts per light fixture	
Light height	24 ft (7.3 m)	
Batteries	Four 4D AGM 12 Vdc batteries wired as a 24-volt system	
Battery capacity	400 Ah total	
Solar	1600 W	
AC charger	50 A	
Engine	Tier 4 final diesel	
Fuel tank capacity	22 gal (83 L)	
Sound level @ 23 ft (7m)	68.5 dBA avg. at max. load	
Deployed footprint, L × W	180 × 164 in (457 × 417 cm)	
Travel height	9 ft (2.72 m)	
Weight, approx.	2700 lb (1225 kg)	

Options

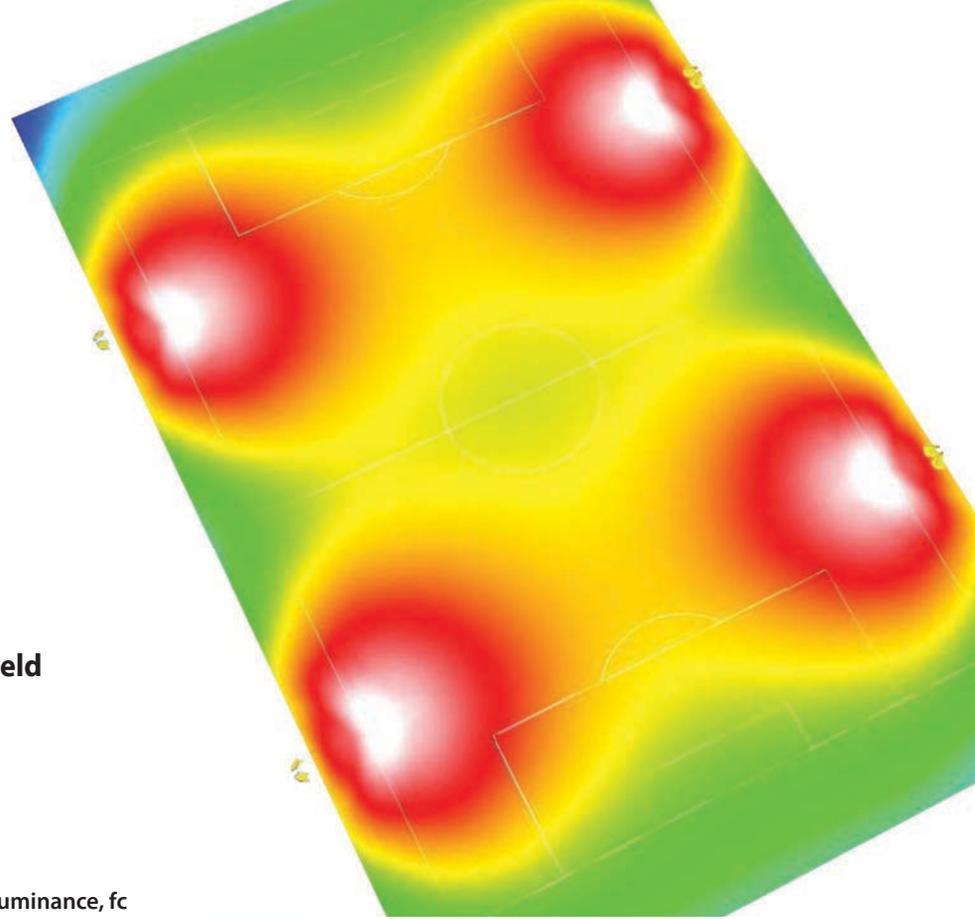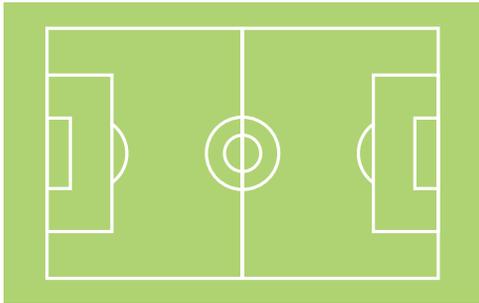30-foot tower with electric winch

Asset Tracker for GPS location
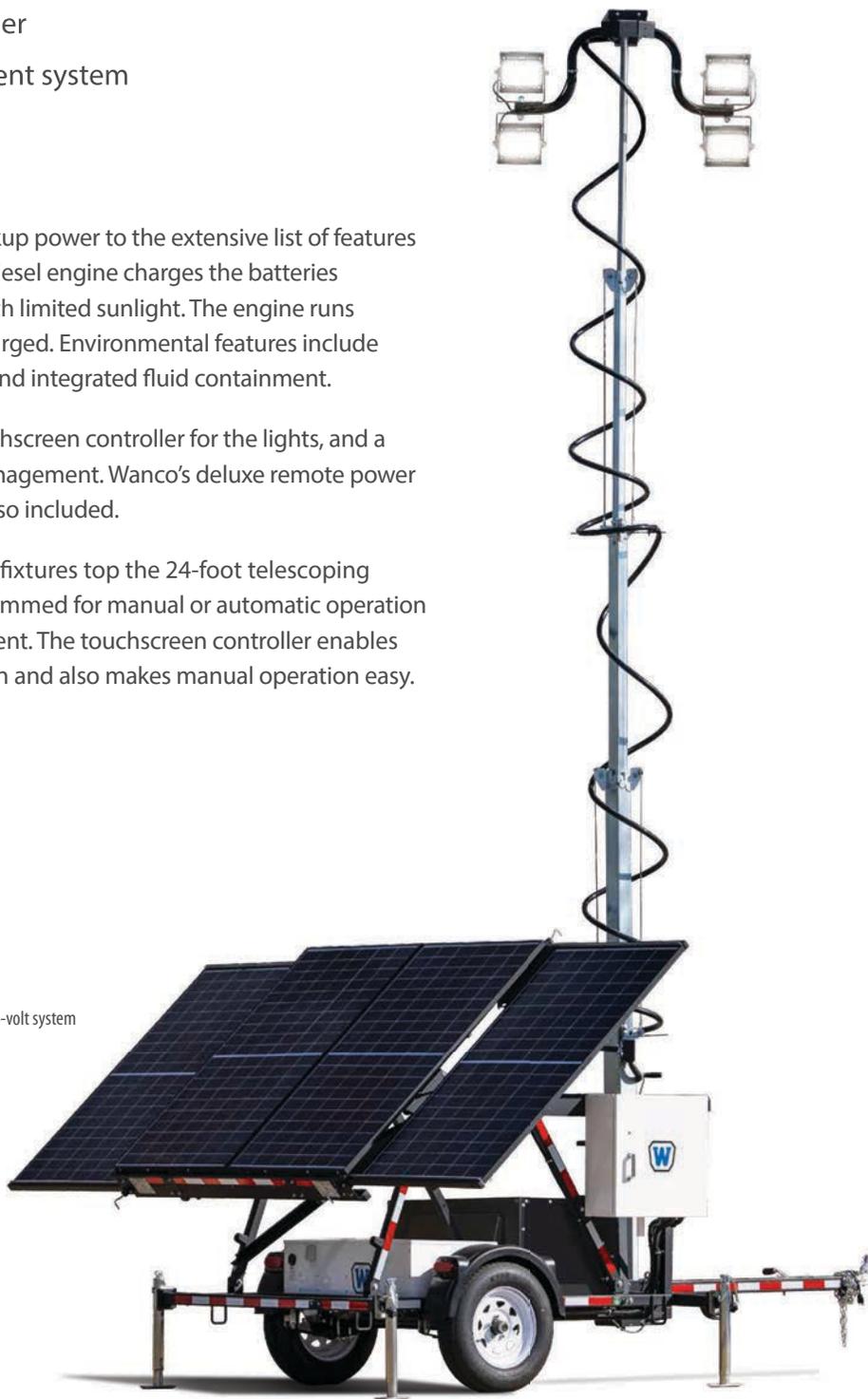
Programmable Hybrid Solar Light Tower
Model WLTS-M-1600H

*Total coverage ≥ 0.5 fc with lights at 24 feet and 100% brightness, fixtures tilted down 15° from vertical. For coverage with optional 30 foot tower, visit wanco.com.

Lighting Performance

1600 W Programmable Light Towers with 200 W light fixtures
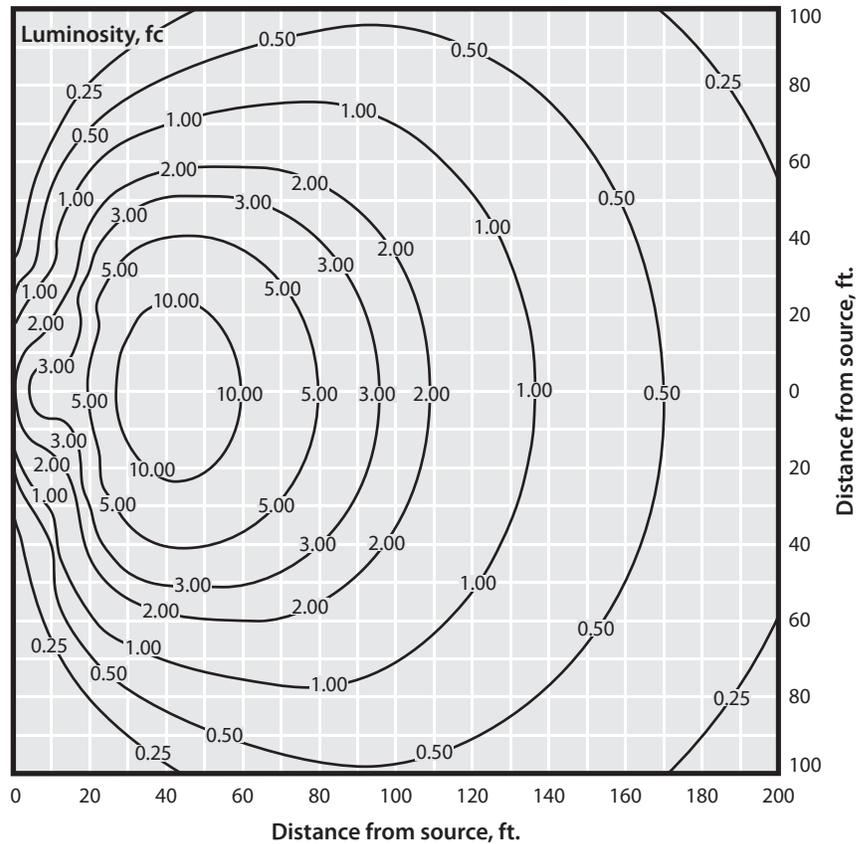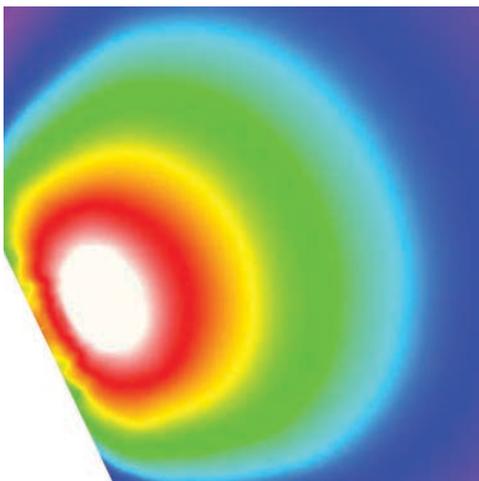

Four light towers on a regulation soccer field

Lights	Four dimmable 200-watt fixtures per tower
Brightness setting	100%
Luminous flux	128,180 total lumens per tower
Light height	24 ft (7.32 m)
Lighting area	400 × 250 ft (122 × 76 m)
Total acreage	2.2960

Average illuminance, fc

0	0.10	0.25	0.50	1.00	2.00	3.00	5.00	10.00

Single light tower isolines

Lights	Four dimmable 200-watt fixtures
Brightness setting	100%
Luminous flux	128,180 lm
Light height	24 ft (7.32 m)
Lighting area	200 × 200 ft (61 × 61 m)
Total coverage*	26,510 sq ft (2460 m²)
	0.6086 acres

*Total coverage ≥ 0.5 fc with lights tilted 15° down from vertical.

Lighting Performance

800 W Programmable Light Towers with 160 W light fixtures
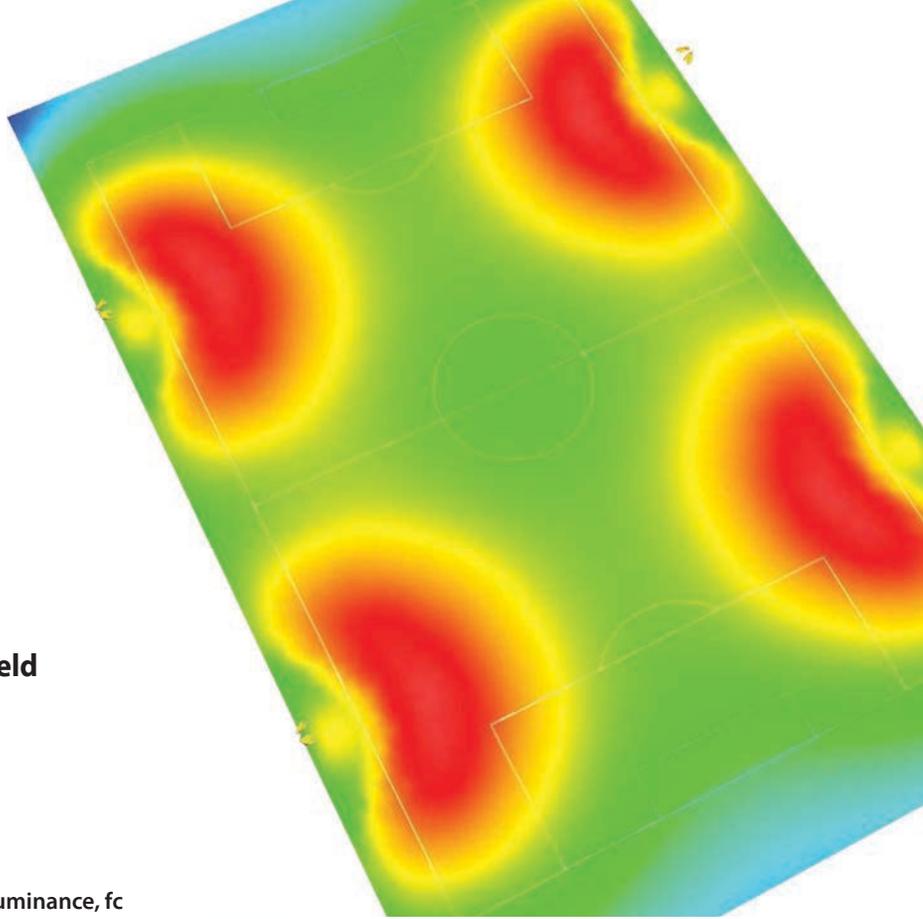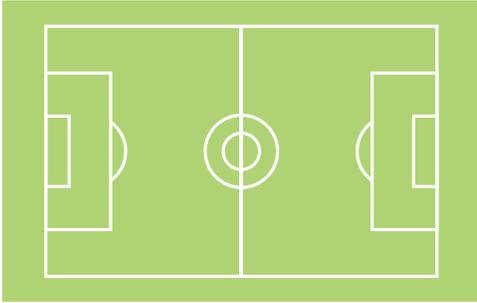

Four light towers on a regulation soccer field

Lights	Four dimmable 160-watt fixtures per tower
Brightness setting	100%
Luminous flux	92,928 total lumens per tower
Light height	24 ft (7.32 m)
Lighting area	400 × 250 ft (122 × 76 m)
Total acreage	2.2960

Average illuminance, fc

0	0.10	0.25	0.50	1.00	2.00	3.00	5.00	10.00

Single light tower isolines

Lights	Four dimmable 160-watt fixtures
Brightness setting	100%
Luminous flux	92,928 lm
Light height	24 ft (7.32 m)
Lighting area	200 × 200 ft (61 × 61 m)
Total coverage*	21,325 sq ft (1980 m²) 0.4895 acres
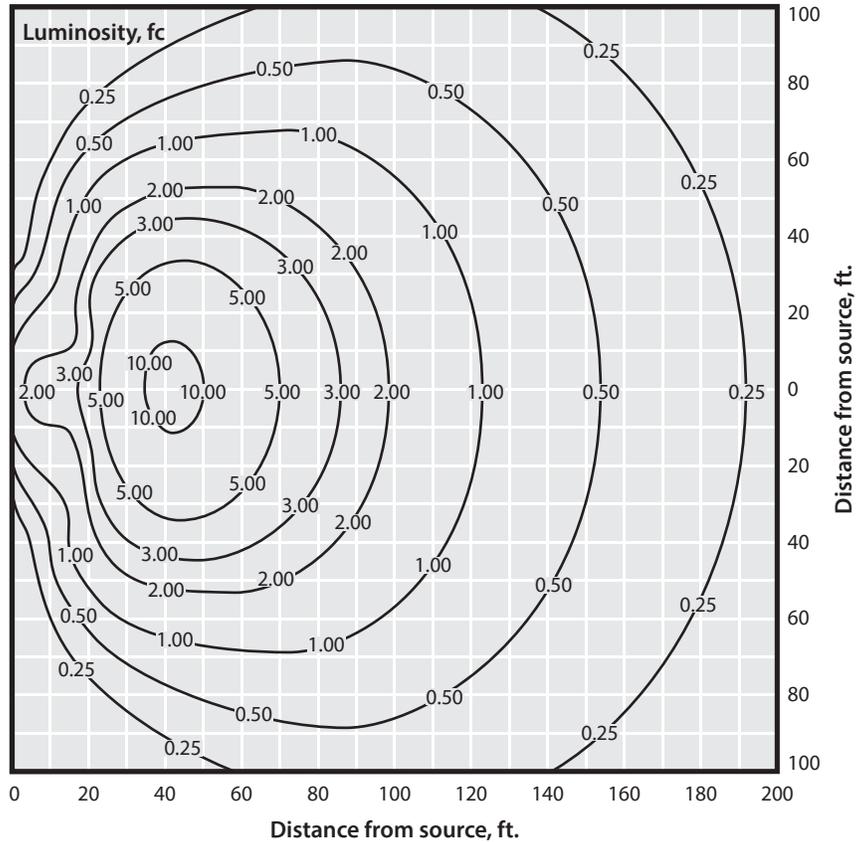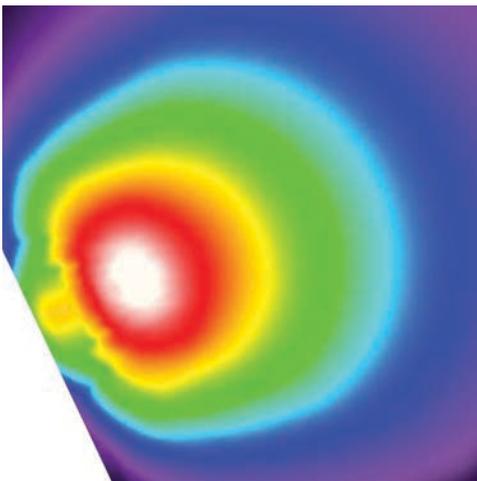
*Total coverage ≥ 0.5 fc with lights tilted 15° down from vertical.

Small Solar Light Tower

- LED lights on 20-foot tower
- Compact trailer
- Automatic and manual operating modes
- Battery powered and solar charged
- Maintenance-free AGM batteries

Wanco's Small Solar Light Tower provides bright, concentrated LED light for night work. Common applications include utility and road repairs, security checkpoints and gated entrances, flagger stations and personal work areas. Solar light towers operate silently, which makes them perfect for use in residential areas without disturbing the public.

This light tower features four highly efficient LED light fixtures on a 20-foot telescoping tower. The tower rotates nearly 360 degrees without lowering the lights, which operate at any height. The lights can be individually aimed without the use of tools, and they stay where you point them. The tower remains vertical at all times, and the trailer's low center of gravity keeps the tower stable.

Batteries provide power and an automated solar-based charging system keeps the batteries charged. Functions include manual control and a selection of automatic modes that include dusk-to-dawn operation. Autonomous operation is possible spring, summer and fall.

Brief specifications

Lights	Four adjustable LED light fixtures
Luminous flux*	8715 lumens per fixture
	34,860 total lumens
Light height	20 feet (6.1 meters)
Coverage area†	8200 sq ft (762 m²)
	0.1883 acres
Power draw	60 watts per light fixture
Batteries	400 Ah, wired as a 24-volt system
Solar	730 W
AC charger	40 A
Deployed footprint	158 × 83 in. (401 × 211 cm), L × W
Drawbar	Folding drawbar with 2-inch ball hitch
Travel height	108 in (273 cm)
Weight, approx.	1550 lb (703 kg)

Options

24/7 digital timer
Asset Manager for GPS location

Small Solar Light Tower
Model WLTS-SM

*Fixed brightness, light fixtures are not dimmable.
†Total coverage ≥ 0.5 fc with fixtures tilted 15° down from vertical.

Lighting Performance
Small Light Towers
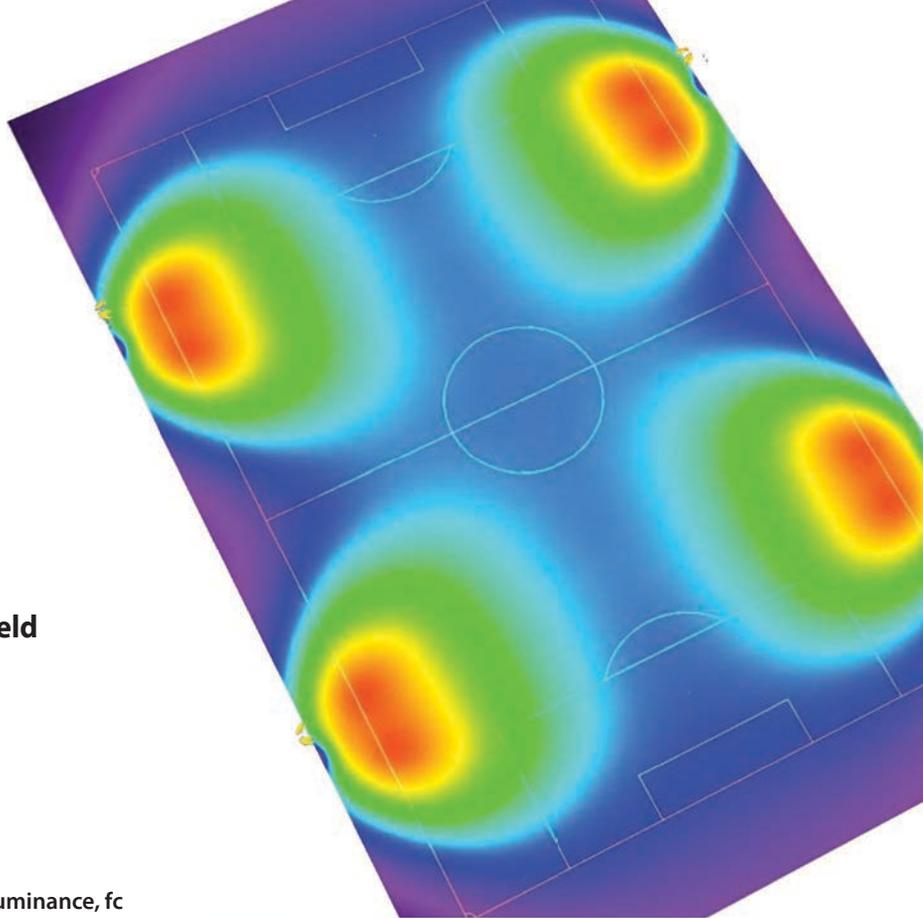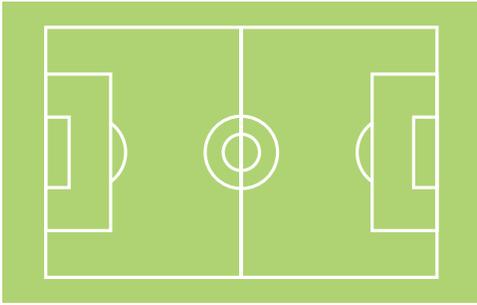
Four light towers on a regulation soccer field

Lights	Four 60-watt fixtures per tower
Luminous flux	34,860 total lumens per tower
Light height	20 ft (6.10 m)
Lighting area	400 × 250 ft (122 × 76 m)
Total acreage	2.2960

Average illuminance, fc

0	0.10	0.25	0.50	1.00	2.00	3.00	5.00	10.00

Single light tower isolines

Lights	Four 60-watt fixtures
Luminous flux	34,860 lm
Light height	20 ft (6.10 m)
Lighting area	200 × 200 ft (61 × 61 m)
Total coverage*	8200 sq ft (762 m^2)
	0.1883 acres
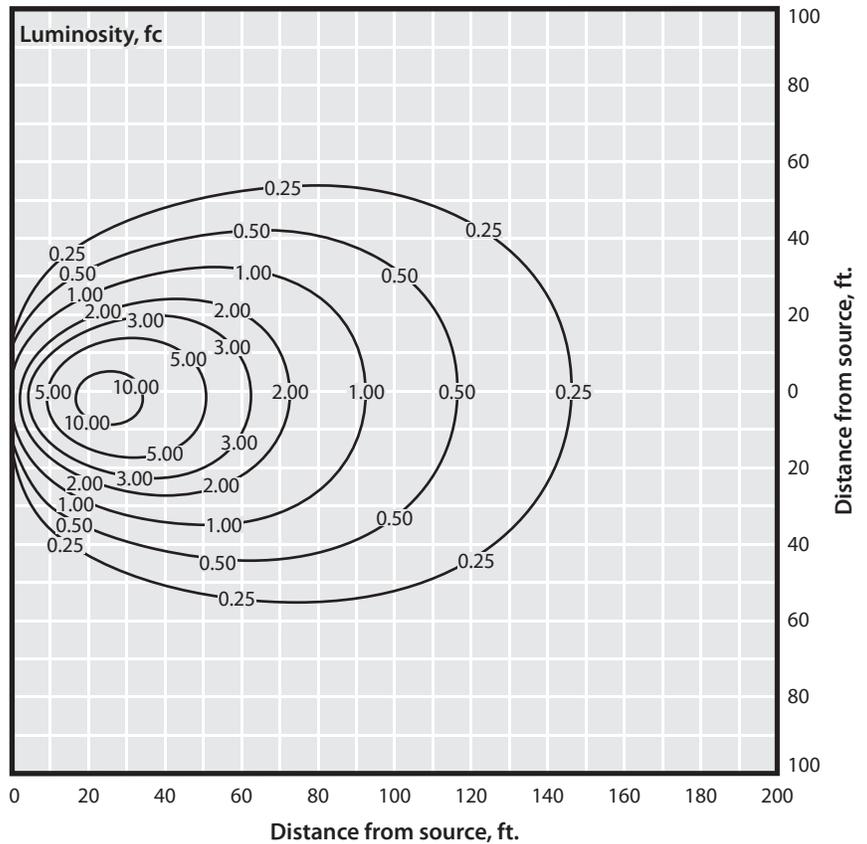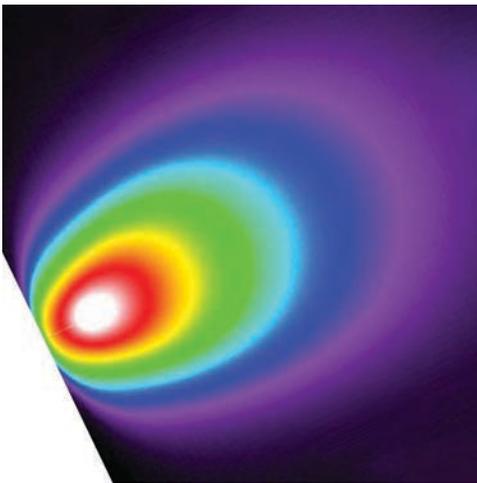
*Total coverage ≥ 0.5 fc with lights tilted 15° down from vertical.

Wanco headquarters and 265,000 square-foot factory located in Arvada, Colorado.

We're growing! New 75,000 square-foot production expansion.

Wanco is your trusted source for best in class products that are easy to use. With unique features, superior functionality and outstanding versatility and dependability, Wanco products deliver exceptional value for all our customers.

Since 1984, Wanco has been a leading manufacturer of traffic control, power and portable lighting products. Industry leadership is more than just selling the most equipment. It means serving the public good, exercising responsibility and setting an example of excellence in every aspect of business. At Wanco, we are committed to our role as an industry leader.

To learn more, visit us online at **wanco.com** or contact us by calling **1-800-972-0755**. We look forward to serving you.

Due to Wanco's commitment to continuous improvement of our products, all information is subject to change without notice. Wanco and the Wanco logo are registered trademarks of Wanco Inc. All other trademarks are property of their respective owners.

WANCO INC.
5870 Tennyson Street
Arvada, Colorado 80003
800-972-0755
303-427-5700
303-427-5725 fax
www.wanco.com