

# LFC biodigesters

for facilities in remote locations



## About

The LFC biodigesters are specifically suitable for businesses and other facilities in remote or isolated locations where traditional waste management methods are difficult, expensive, and prone to attracting pests and wildlife.

Power Knot has built on years of experience in military facilities, island resorts, and remote mines to perfect the current products. These products are designed, developed, and assembled by Power Knot LLC in Silicon Valley, California.

Typical uses for LFC biodigesters in remote locations include:

- aerospace launch sites
- alpine tourism
- correctional institutions
- island resorts and hotels
- military bases
- mines
- observatories
- oil fields
- cruise ships, ferries, working vessels, and FSRUs

## Features

- Digests food waste on site
- Process is continuous — load at any time
- All waste is converted to water — machine never needs emptying
- Aerobic digestion ensures no smells
- Can be installed in kitchen or garbage area
- Meets USPH and NSF regulations
- Simple operation — can be used by existing staff
- Weight of waste is continuously monitored and recorded
- Color touch screen interface displays statistics on usage and amount of waste
- Incorporates comprehensive diagnostics and service schedules
- Connects to the LFC Cloud so statistics and diagnostics can be monitored remotely
- First and only commercial grade biodigester to be fully NTEP certified
- All stainless steel construction
- Optional NFC card add-on to identify the user, source of the waste, or the type of waste
- Three year warranty (subject to terms)



## Benefits

- Reduce waste management costs
- Eliminates need to handle, store, and transport waste
- Can digest types of food that composting cannot accept, for example, meat and dairy products
- Prevents plastic items from entering the waste stream
- Eliminates odors to mitigate risks of attracting wildlife such as bears, raccoons, rats, and pests
- Greatly reduces costs to dispose of food waste
- Significantly reduces carbon footprint
- Reduces size, quantity, and smells of trash bins
- Improves operations and saves time
- Weigh and dispose of waste food in one machine
- Multiple models available ensures correct sizes for any service
- Data for multiple machines can be aggregated into a single report to share with stakeholders
- Connection to the LFC Cloud: (i) allows staff and owners to see statistics on waste food; (ii) allows operational staff to see diagnostics; (iii) ensures Power Knot can support you easily; (iv) enables remote monitoring from any mobile, tablet, or computer device

## Reliability

The LFC biodigesters are built with an emphasis on industrial-grade materials and construction.

Designed to meet the stringent needs of the US military and cruise ships, the LFC biodigesters are engineered to withstand demanding environments and heavy usage, ensuring longevity and consistent performance even in remote and challenging locations. Mechanisms are incorporated into the LFC biodigesters to enhance their reliability, mitigate risks of potential malfunctions, and ensure continued operation even under certain failures.

The LFC biodigester is currently on its eighth generation build.



## Connection to the LFC Cloud

The LFC Cloud shows statistics on usage, service schedules, and diagnostics for your LFC biodigesters. Lifetime access to the LFC Cloud is included in the purchase of an LFC biodigester at no charge and you can access the LFC Cloud from any device anywhere in the world.

The LFC biodigester sends data on its operations securely to the cloud server where it is retained for five years. There is no charge for your usage of the LFC Cloud.

The usage of bandwidth is minimal, allowing personnel to easily monitor LFC Cloud analytics from areas with limited connectivity.

If internet access is sporadic, data is retained on the LFC biodigester for two years and uploaded when internet connection resumes.

## Viewing Data on the LFC Cloud

The LFC Cloud allows you to view all the data about the operation of the LFC biodigesters in your facility. You can see the amounts of food waste ingested periodically and also see all the diagnostics of the machine. In the event of a problem, Power Knot personnel can assist you to identify the cause and help to resolve the issue quickly.

The grouping feature enables you to aggregate the data from multiple LFC biodigesters on a single site, multiple machines across multiple facilities, and multiple entities in an organization.

## Using the Data in Sustainability Reports

The LFC biodigester is fully NTEP certified. This is the same certification as, for example, a weight scale in a supermarket. This means that when the LFC biodigester reports that you have diverted a specific weight of food waste from the landfill, you are assured of its accuracy.

| Selection  | Serial   | Model    | Waste per day (kg) |            |
|--|----------|----------|--------------------|------------|
|  |          |          | 2023-01-22         | 2023-01-23 |
| <input type="checkbox"/> ▶ Fort 1                  | multiple | multiple | 3045.4             | 2022.0     |
| <input type="checkbox"/> ▼ Fort 2                  | multiple | multiple | 5233.6             | 3640.0     |
| <input checked="" type="checkbox"/> L ▼ Building 1 | multiple | LFC-300  | 1811.1             | 1078.0     |
| <input type="checkbox"/> L ▶ DFAC (i)              | multiple | LFC-300  | 436.9              | 306.0      |
| <input type="checkbox"/> L ▶ DFAC (ii)             | multiple | LFC-300  | 539.5              | 379.0      |
| <input type="checkbox"/> L ▶ DFAC (iii)            | multiple | LFC-300  | 834.7              | 393.0      |
| <input checked="" type="checkbox"/> L ▶ Building 2 | multiple | multiple | 3422.5             | 2562.0     |
| <input type="checkbox"/> ▶ Fort 3                  | multiple | LFC-500  | 959.1              | 311.0      |

It is therefore safe for you to declare accredited figures in any sustainability report that you publish.

The LFC biodigester is only NTEP certified food waste digester in the world. No other machine is fully certified. NTEP certification on a single component does not mean your machine will provide accurate results. Without NTEP certification, you may as well make up the numbers for your sustainability reports!

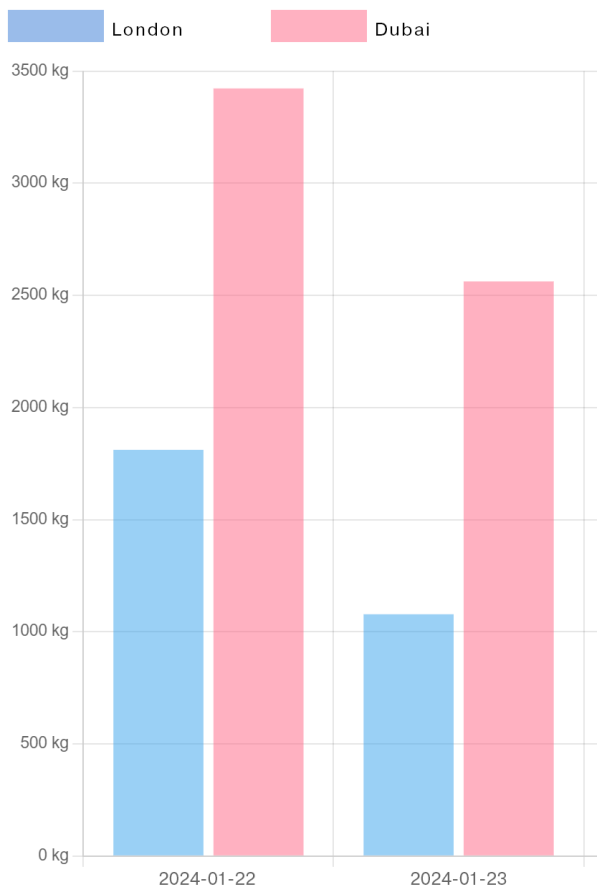
## Site Survey

Power Knot personnel can visit your site to assess where LFC biodigesters are best located, the number required, and how they can be configured to your facility's unique needs. We will create a report with 3D renderings of the drawings in various CAD formats.



## Installation

Power Knot has relationships with reliable, experienced companies that have installed Power Knot's LFC biodigesters. We can facilitate the installation process for you.





## Onsite Commissioning and Training

Once installation is completed, Power Knot personnel or contractors can commission the LFC biodigesters anywhere in the world and provide a written report. We will also train your staff on the use of the biodigesters stressing what can go in and what cannot. We complete training for the operators, supervisors, and technical staff.

## Service and Support

The LFC biodigester continuously uploads the status of 53 sensors to the LFC Cloud to enable staff to review issues. Power Knot is therefore able to monitor the status of your machine and assist you remotely to quickly resolve any issues. The LFC Cloud also sends automated email notifications to alert users and supervisors of any discrepancies with their machine. Our comprehensive User's Manual aids staff with servicing.

In instances where onsite support is required, Power Knot's team of engineers stands ready to provide hands-on service. We can swiftly reach any location, no matter how remote, to ensure the reliability and functionality of the LFC biodigester. We offer cost-effective, responsive onsite support to enhance the peace of mind for our customers.



**Sold, serviced, and supported by:**



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