#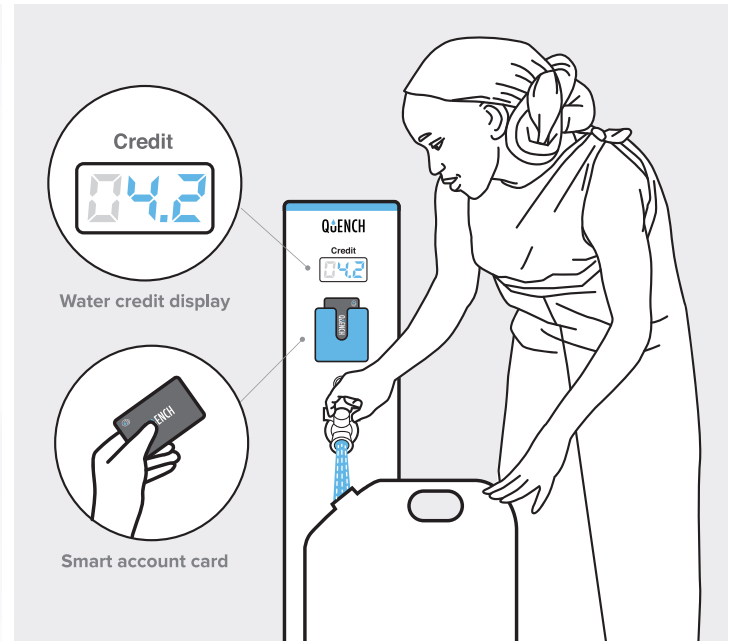 QUENCH IS A SMART WATER DISPENSING SOLUTION THAT ENSURES ALL-DAY ACCESS TO SAFE DRINKING WATER AND TRANSPARENCY OF EVERY TRANSACTION

Credit
04.2
Water credit display

Smart account card

QUENCH

The Millennium Development Goals aim to halve the percentage of the population without access to safe drinking water. Considerable progress has been made, but 24/7 availability remains a challenge and maintenance is hampered by traditional means of revenue collection and transaction costs. Quench offers an improved water management solution that can increase access and provide more reliable service.

Robust Construction
Quench lowers maintenance costs with a rugged, modular design. Parts are easily replaced, and during repair, the system can be manually operated, allowing for continued water access.
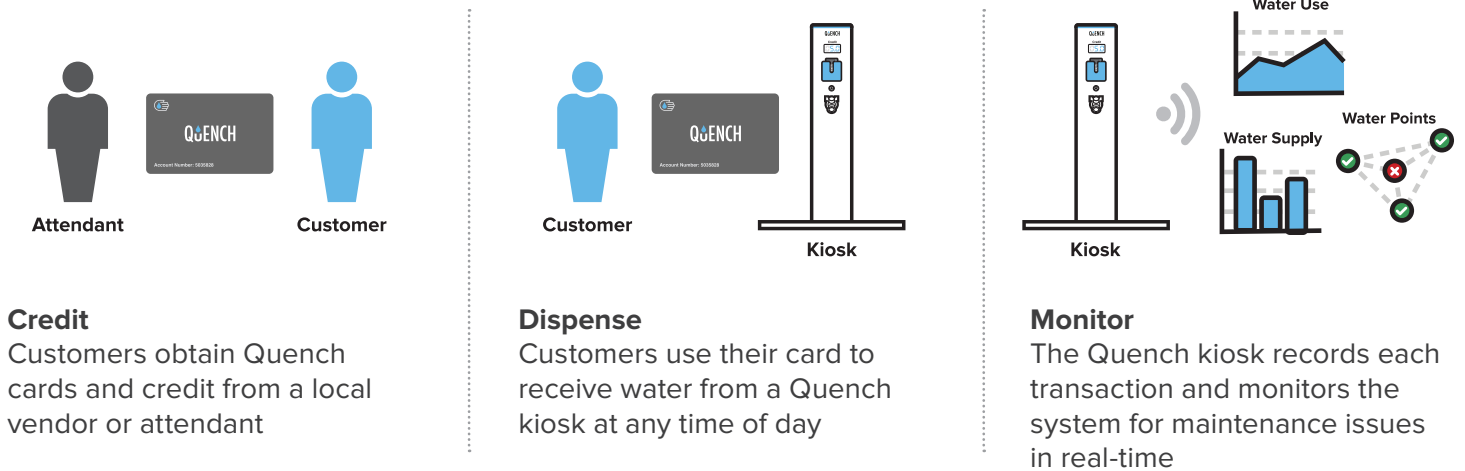
Simple To Use
Quench kiosks are easy and intuitive, lowering confusion and minimizing transaction times. Installing Quench is simple and flexible as the kiosk can replace existing water systems or be implemented alongside current designs, whether grid power is available or not.

Enables Fair Distribution
Quench enables accurate daily water metering and dispensing, storing allotments and transactions in a smart card system. This allows operators to allocate daily lifeline amounts to families and ensure equitable water distribution based on seasonal availability.

quenchsystem.com

How it works

Attendant   **Customer**

Customer   **Kiosk**

Kiosk   Water Use / Water Supply / Water Points

Credit
Customers obtain Quench cards and credit from a local vendor or attendant

Dispense
Customers use their card to receive water from a Quench kiosk at any time of day

Monitor
The Quench kiosk records each transaction and monitors the system for maintenance issues in real-time

Benefits

For Customers

- Quench provides more reliable, 24/7 service, while lowering the costs of staffing and financial management of the water dispensing.

- Quench allows local operators to design a payment model that fits their customers' needs, including pay-as-you-go, pre/post paid usage or free/subsidized service.

- It ensures allotment of a lifeline amount of water based on resource availability, lowering the need to store at home and shortening the wait time on queues.

- Quench kiosks are easy to operate and help minimize transaction costs and times while ensuring clarity.

For Governments and Operators

- Quench kiosks are easy to install and maintain, and feature a rugged, anti-tamper and weatherproof design. Components can be easily removed and replaced and the kiosk can still be operated during maintenance.

- The Quench system is designed to be adaptable to many different settings and dispensing options, allowing for it to be implemented in diverse environments and contexts.

- Quench makes water schemes transparent. The system provides auditable transaction logs, allowing governments and donors to create performance-based contracts with water suppliers, ensuring improved maintenance of water points.

- If available, Quench can be connected to cellular or wireless networks to enable real-time metering and remote system monitoring.

Partners

THE EARTH INSTITUTE
COLUMBIA UNIVERSITY

The Earth Institute and the School of Engineering at Columbia University are the world's leading academic centers focused on addressing the challenges of global sustainable development. In addition to mobilizing the sciences, education and public policy to create sustainable programs abroad, EI also provides multi-sector policy advice to governments, the United Nations and NGOs on issues related to sustainable development and the Millennium Development Goals.

Professor Vijay Modi is leading the Earth Institute's efforts that cut across energy, rural infrastructure and development. He led the UN Millennium Project effort on the role of energy and energy services in reaching the Millennium Development Goals.

The Sustainable Engineering Lab at The Earth Institute brings together a diverse set of talents who work in collaboration to engineer solutions to global development challenges. SEL is a team of international development experts, faculty, engineers, designers and data analysts.