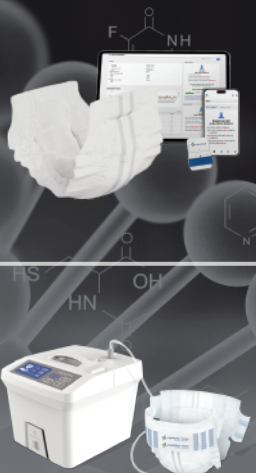


Hygera networks Inc.

Smart Hygiene Change Maker

Urination Monitoring Solutions

- Smart Diaper System
- Automatic urinary treatment care robot
- Urination pattern management platform



COMPANY

History

- 2021**
 - 09 Establishment of corporation.
- 2022**
 - 01 Establishment of corporate research center.
 - 11 **Global hygiene product company and urinary management platform business cooperation agreement.**
 - 12 **Health Industry Promotion Agency Urination Automatic Treatment Care Robot R&D Excellence Award.**
- 2023**
 - 01 Venture Business Certification.
 - 04 Selection of the inter-ministerial excellence and linked care robot development project (socially disadvantaged technology).
 - 07 Selection of Research Project for the Korea Health Industry Development Institute Care Robot Service Demonstration Project.
 - 08 Seoul Economic Promotion Agency Care Robot Technology Commercialization Technology Development Selection.
 - 12 ISO 9001 Certification (Smart Diaper System).
- 2024**
 - 05 Senior Innovation Product Certification (Seongnam Senior Industry Innovation Center).
 - 07 Automatic urination treatment care robot KC certification and performance test.

Certification



ISO9001 Certificate KC certification US Patent Korean Patent Corporate Research Institute Venture Business Certification

Partner



SOLUTIONS OVERVIEW

A new era of hygiene products has arrived.

Sanitary products from traditional industries are now being integrated into new industries and expanding into solutions in the health and medical fields. From the cradle to the grave, HYGERA's urine management solutions provide services through a variety of solutions that allow you to visually see a new world that no one has ever experienced.



**A specialized company in urinary care based on
IT convergence technology**

BUSINESS SCOPE

Hygera Network Inc. addresses urinary incontinence management in geriatric patients through its incontinence management products. We provide a platform that can support personalized education and effective care activities through personalized urination data. These platforms create a better environment by collaborating with healthcare companies that want to share healthy lives.

Smart Urine Monitoring System

Supply of products for urinary management

- Smart diapers for adults.
- Smart diapers for infants and toddlers.
- Automatic urinary treatment care robot.
- Smart panties for incontinence management.

U-Health Care Platform

Care & Disease through Urine

- Detect/Collection Information.
- Service Prediction of Urination Disorder and Diaper Dermatitis.
- Diaper and Urine Pattern Statistics and Monitoring.
- ADL Improvement Urination Training.
- Digital Urination Diary.

Technical cooperation

Technology cooperation based on urine detection/analysis technology

- Smart diaper system technology.
- Platform cooperation.
- Urine pattern analysis and disease prediction information.

Technical cooperation area

- Smart Diapers for Adults and Babies.
- Smart Incontinence Pants.
- Smart Under pads.
- Urinary Pattern Data Science.
- Collaboration in Healthcare and Health.

Smart Diaper System

The Hygera smart diaper system creates an environment that provides innovative care for urination management for patients at home or in nursing facilities. It solves the difficult care problem of not being able to check the state of urination in the diaper and protects the patient's healthy life by preventing urinary tract infections and skin rashes caused by urination. Data reliability was ensured through data collection and analysis of patients' urination patterns.

Product Composition



Monitoring WEB, Mobile Application.

Dash Board

- Basal rat replacement and usage statistics
- Urine pattern statistics for patients with incontinence, etc.
- Nocturia statistics and abnormality detection information for dehydration, etc.
- Linkage with nursing home management program.

Real-time urination pattern chart

- Patient status assessment through chart.

Urinary training

- Urinary training records that can be used as a basis for claiming medical treatment fees at nursing hospitals.

Monitoring

- Real-time diaper saturation status monitoring.
- Information on urination initiation, diaper change, first urination, and non-replacement time after saturation.
- Information on efficient diaper care performance by group.

Mobile APP.

SW Key features

- Real-time urination pattern monitoring.
- Real-time individual daily cumulative urine volume information.
- Individual, daily, weekly diaper usage statistics/analysis.
- Analysis of individual urination patterns by period.

Specification(U-Clip)



- **Product Name:** Hygera u-Clip
- **Main Function:** Transmit urination detection information
- **Communication Method:** BLE 5.0
- **Battery Type:** Lithium Polymer (Rechargeable)
- **Charging Method:** Micro 5-pin
- **Product Size:** 54(W)x72(H)x13(T)mm
- **Product Weight:** 40g
- **Bulk Charging Time:** Up to 3 hours
- **Usage Period:** Approximately 14 days when fully charged (depending on usage environment)
- **Waterproofing Grade:** Daily Waterproof

Data flow



Types of Smart diaper



Smart diaper (Out cover)



Smart Pad (Inner Pad)



Smart Pad (Inner Pad, Round type)

Urination Care Robot

The Hygera Automatic urinary treatment care robot is a product that can easily support nursing work. It reduces the urinary care work of existing disposable diapers by 90% and can also dramatically reduce waste. Anyone can use the urination suction pad according to gender and physical condition. It supports more efficient nursing care by replacing manual recording of urine output.

Composition



Key features

1

Reduction of workload (once per day) and wastes

- Reduces the frequency of continence management by 80% (90% less waste) compared to 8 times for traditional disposable diapers.

2

A.I Automatic Urine Treatment

- A.I Suction for incontinence, polyuria, and nocturia.
- Automatic urine suction.
- Defecation detection alarm.

3

Prevention of skin diseases and urinary tract infections

- Prevents skin diseases caused by diaper rash.
- Prevents urinary tract infections.

4

Reduction of extra work

- Laundry work due to urinary overflow.
- Hand-written urination logs.

5

Utilization of urination data

- Utilizing AI analysis of urinary patterns.
- Predicting and analyzing severe dysuria.
- Medical fee billing for continence training and incontinence management.

Specification



SIZE: 280(W) X 300(D) X 230(L)mm

1. **LCD Display:** 4.5 Inch Color
2. **Key Button:** Manual, emergency, automatic, urine volume
3. **Knob**
4. **Cover open button**
5. **Deodorizing filter**
6. **Suction drainage tube**
7. **Urine suction non-woven pad**

Sensor	Performance	Communication
<ul style="list-style-type: none"> · Automatic detection of urination and defecation. · Urine volume. · Temperature, humidity, and pressure. · Backflow prevention. · Urine level detection. 	<ul style="list-style-type: none"> · Noise: 45db · Absorbance: MAX 5L/min · Urine tank capacity: 2,200cc 	<ul style="list-style-type: none"> · WIFI · BLE

Expected effect

AS-IS

- High work intensity during the daytime and at night.
- Waste issues.
- Passive care.
- Increased cost → quality of care ↓



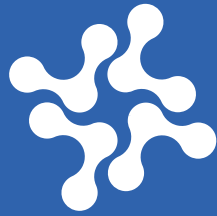
TO-BE

- Over 80% reduction in workload.
- Over 80% reduction in waste.
- Mental stability (urine overflow, etc.)
- Decreased cost → quality of life ↑



- Lack of management for patients with dysuria.
- Outbreaks of urinary tract infections/skin sores.
- Inability to respond to emergencies such as renal failure.
- Increased social costs.

- 24-hour monitored urination management.
- 0% skin diseases.
- Early response to severe dysuria emergencies.
- Leveraging policies and reducing social costs.



HYGERA

