RYNAN Spectro

Convenient
Convenient way for shrimp farmers to measure water quality parameter

User Friendly
Simple user-interface and requires minimal training for users

Data Synchronization
Ability to sync measurement data of each pond to the cloud for historical tracking

TOMGOXY

Integrated Aquaculture Network

A complete shrimp farming management platform developed by RYNAN Technologies, that combines IoT monitoring devices, and cloud services with AI-driven data analytics for precision shrimp farming.

- ✓ Advanced farm design that offers high DO levels, cost-effectiveness, and sustainable solutions

- ✓ Integrated network of IoT devices that collect real-time water quality data

- ✓ Mobile software to sync and monitor all real-time data with AI algorithms to analyse trends, images, and process graphs.

TOMGOXY

Input Materials & Feed

Post Larvae

Farming

Collecting

Processing

Distribution

Consuming

TOMGOXY

AVAILABLE ON
GET IT ON Google Play
Download on the App Store

CONNECT

11:21 LTE 87

TOMGOXY
Welcome to TOMGOXY
Shrimp farming management platform

Username

Password

SIGN IN

New sign up
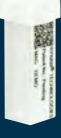
FEATURES

- Compact and portable design
- Simple and easy to use user-interface that requires minimal training
- Analyze water quality parameters in water samples using a ranges of indicators
- Built with industrial communication standards
- Data synchronization and access historical data via TOMGOXY mobile app.

SPECIFICATION

Size (L x W x H)	220 x 150 x 98 mm
Weight	2006.5 g
Communication	4G, Wifi, Bluetooth
User Interface	4.3 inch Touch screen
Barcode scan mode	Sensor mode
Light source	Tungsten Halogen lamp and UV LED
Wavelength range	340 - 850 nm
Measurement methods	Absorbance and Fluorescence
Photometric range	0 - 2.5 Absorbance or 0 - 2.3 Emission
Resolution	0.001
Notification	Beep, Screen Display
Material	Anodized Aluminium
Power supply	220VAC – 50Hz
Operating Environment	Temperature 5 - 55 °C, Humidity 15 - 90%

INSTRUCTION OF USE
CUVETTE INDICATOR

Substance	Testable range (ppm)	Wavelength (nm)	Colour
Nitrite (NO_2^-)	0.08 - 2.65	0.08 - 2.65	
Nitrate (NO_3^-)	1.25 - 38	1.25 - 38	
Phosphate (PO_4^{3-})	0.14 - 2.0	0.14 - 2.0	
Ammonium (NH_4^+)	0.15 - 3.3	0.15 - 3.3	
Ammonia (NH_3)	0 - 1.48	0 - 1.48	
Hydrogen Sulfide (H_2S)	0.05 - 1.0	0.05 - 1.0	
Calcium (Ca2+)	30 - 300	30 - 300	
Magnesium (Mg2+)	150 - 1700	150 - 1700	
Potassium (K+)	0.1 - 37	0.1 - 37	
Iron (Fe2+/Fe3+)	0.55 - 13	0.55 - 13	
Turbidity (TSS)	30 - 530 NTU	NA	
Aglae (ALG)	1x103-2x106 CFU/ml	NA	

Colour indicators: NO2, NO3, PO4, NH4 | NH3 (pH 6 - 9, temp 25 - 30 C), H2S, Ca2+, Mg2+, K+, Fe2+ Fe3+, TSS

RYNAN®
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