



SMART PUMP CONTROL SYSTEM



Introduction

Lingjack DiGiTaL's SMART Monitoring and Control System offers a SMART, Flexible, Customizable Product and Service Digital IoT Platform to enable Businesses to Create Value to their Customers/Stakeholders, Grow the Business, Maximize Operational Efficiency, Increase Productivity, Reduce Cost, Downtime and Labour.

We work with YOU to provide the best product and service platforms that meet your needs.

First in the World SMART wireless cloud-based pump systems. Directly replaces traditional control systems at fraction of cost.

SMART PUMP Monitor and Control

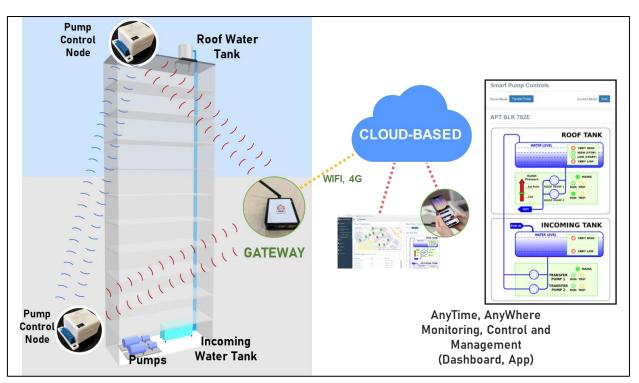
Wirelessly Monitor and Control Pump Operation based on main power, pump start/stop/overload, water level and outlet pressure statuses.

Enabling Fail-Safe Operations with intelligent SMART Features:

- No loss of functionality in event of loss of Cloud connectivity with Independent Local Node-Level Logic Decision and Control.
- ✓ Automatic reset in event of pump overload.

AnyTime, AnyWhere Full Monitor and Control of System Online with Secure Live Interactive Cloud-Based Dashboard. Enable rapid response in emergency situations.

Comprehensive Support Services (Monitoring, Alerts, On-site response) to cater to your support and maintenance needs.



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Key Product Features:

- \checkmark Easy to add new capabilities whenever needed.
- ✓ SMART Presence: Always Present, High Availability Connectivity with Secure, Fully Mesh Wireless Architecture.
- No more wires: Low power wireless technology, battery operated (~ 5 years with active battery status).
- Automatic and optimal link routing with intelligent re-routing in event of link failures.
- ✓ Supports up to 10,000 sensor nodes or devices per networks.

Wireless, High Availability & Secure

Flexible, Expandable, Customizable

✓ Graphical Visuals for

✓ Activity Log, Servce

 ✓ Maintenance Planning, Schedule Tests.
 ✓ Reports Generation.

History, Event Management

Status.

App.

Pump Operation and

✓ Offsite, Remote Monitor &

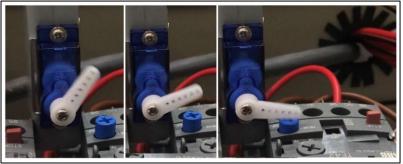
Control on Web and Mobile

Easy to Deploy Architecture

AnyTime, AnyWhere: Live Interactive Cloud-Based Dashboard

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Automatic Reset Pump Overload Reset



Smart Fail-Safe Features

Independent Local Node-Level Logic Decision and Control

- Autonomous Control in event of loss of Cloud Connectivity.
- Customisable Decisions and Logic Programming

Add New Monitor and Control Areas Easily with other Functional nodes.

- ✓ Power Monitoring
- ✓ Temperature Humidity
- ✓ Others



Power Monitoring Node

Temperature Humidity

Relay Control Node





Key Specifications

Systems Configuration	Gateway	LAN, Wifi Internet Gateway		
	Pump Control Node	2 Pump Control (with connections to 4 tank level probes)		
		1 Pump Control (with connections to 4 tank level probes)		
	Water Tank Level Indicator Node	Water Tank Level Indicator		
	Power Indicator Node	Voltage, Current Monitor		
	Temperature Humidity Node	Temperature Humidity. Option: Sound, Light, CO2, Vibration		
	Live and Interactive Dashboard	Browser-Based Dashboard, Iphone IOS, Android Based App		
Communications	Topology	Mesh		
	Frequency	2.4GHz Bluetooth 5.0, IEEE 802.15.4,		
	Range (Line-of-Sight)	Indoor 30m (max), Outdoor 150m (max)		
Environment	Operating Temperature, Humidity	0°C to 55°C, 90% Relative Humidity		
	Enclosure	IP 52		
Power	Battery	Lithium Battery 3.7V, 8500mAh (~ 5 years battery life with active status monitoring)		
Gateway	Overall Dimensions, Weight	~ (L x W x H) 82 x 56 x 19.5 mm, ~105g		
	Processor, RAM, GPU	Broadcom BCM2837B0 quad-core A53 (ARMv8) 64-bit @ 1.4GHz, 1GB LPDDR2 SDRAM, Broadcom Videocore-IV		
	Networking	Gigabit Ethernet (via USB channel), 2.4GHz and 5GHz 802.11b/g/n/ac Wi-Fi, Bluetooth : BLE 5.0		
	Accessories	UK Adapter, Wireless Router/Data Router		
Relay Node	Function	Multi-Functional and Multi-Purpose Configurable to supports Multiple Analog, Digital, Discrete connections		
	Overall Dimensions, Weight	~ (L x W x H) 90 x 50 x 27 mm, ~90 to 115g		
	Rated Load	10A / 250 VAC, 30A / 30VDC		
Temperature,	Overall Dimensions, Weight	~ (L x W x H) 65x46x42 mm, ~ 90g		
Humidity Node	Temperature Sensor	Range : -10°C to 85°C, Resolution : 0.1°C, Accuracy : +/- 1°C (Max)		
man	Humidity Sensor:	Range: 0 to 80% RH, Resolution : +/- 0.1% RH, Accuracy : +/- 5% RH		

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Standard and Premier Services

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- ✓ Comprehensive Support Services (Monitoring, Alerts, Onsite Response) to cater to your support and maintenance needs.
- ✓ Leasing and Maintenance Services.
- ✓ Standard and Extended Warranty Services
- After-Sales Services eg. Site-Servicing, Software Maintenance, Training, Spares.



About LINGJACK DiGiTaL

- ✓ Lingjack believes in Innovation. We believe that we can incorporate Digitalization and Technology in our operations and business. In 2017 we formed our own R&D team to conceptualize and develop technology products.
- ✓ Lingjack DiGiTaL was formed as an arm of Lingjack Engineering, with the objective to provide Total Solutions that leverage on Technology to deliver Value to our Customers.
- ✓ In 2019, we launched the first SMART monitoring system to enhance the Fire and Safety aspect in a facility in the world. We are also constantly working on AI, data analytics and robotics solutions to our Customers.

Request for a Demo, We Like to Hear Your Needs

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