



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

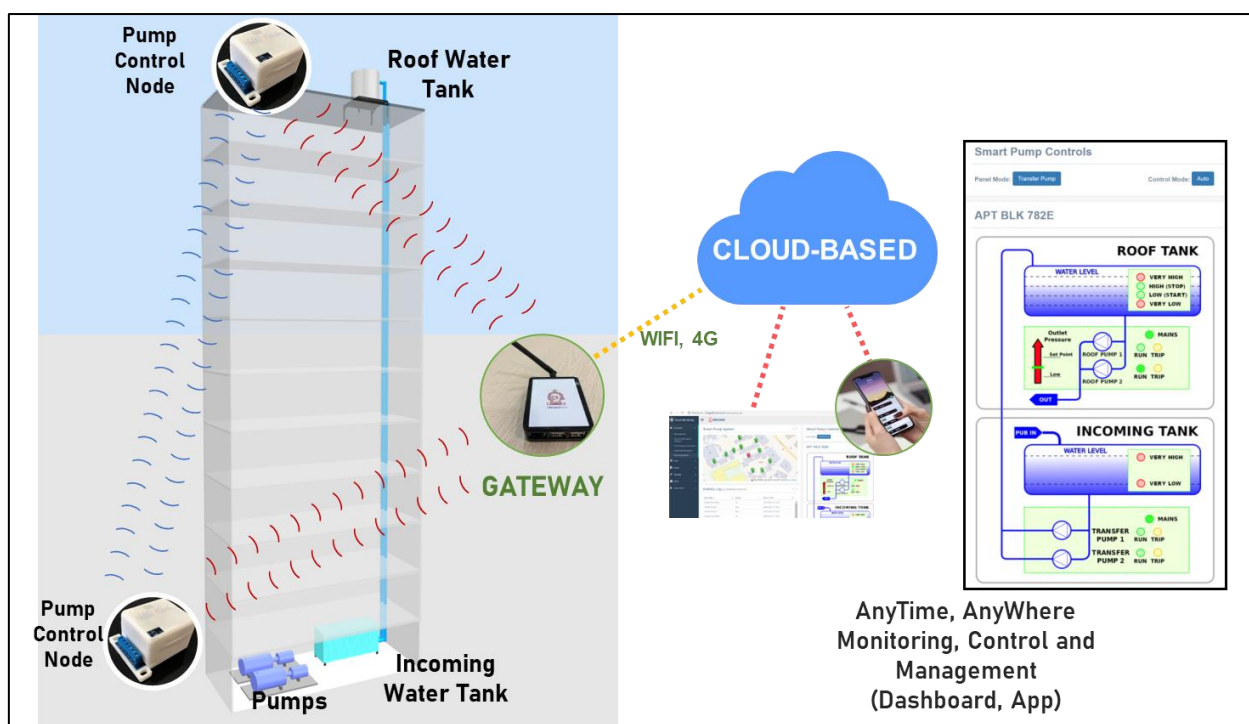
Wirelessly Monitor and Control Pump Operation based on main power, pump start/stop/overload, water level and outlet pressure statuses.

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.





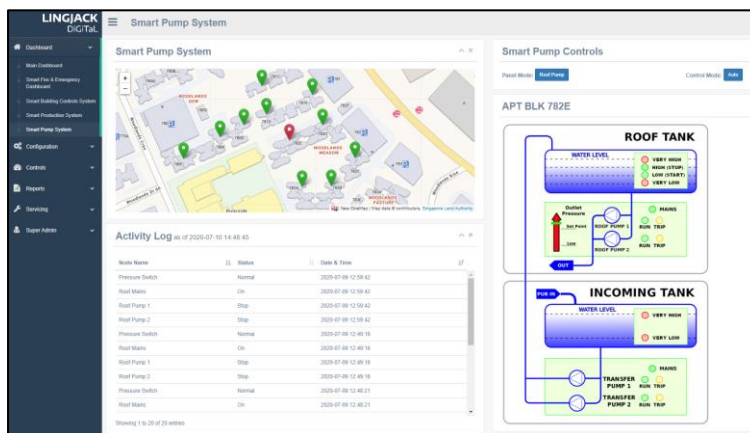
Key Product Features:

- ✓ 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

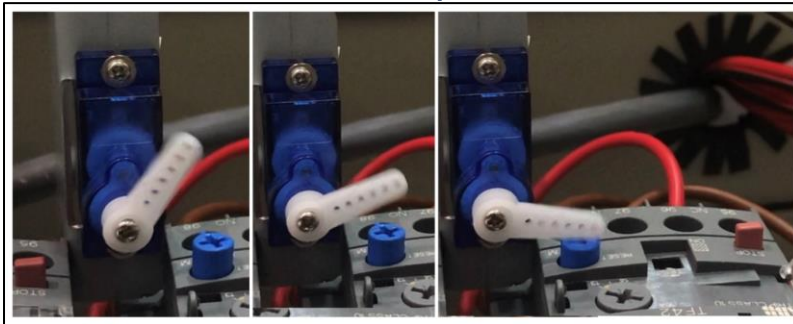
Easy to Deploy Architecture

**AnyTime,
AnyWhere:
Live
Interactive
Cloud-Based
Dashboard**



- ✓ Graphical Visuals for Pump Operation and Status.
- ✓ Offsite, Remote Monitor & Control on Web and Mobile App.
- ✓ Activity Log, Service History, Event Management
- ✓ Maintenance Planning, Schedule Tests.
- ✓ Reports Generation.

Automatic Reset Pump Overload Reset



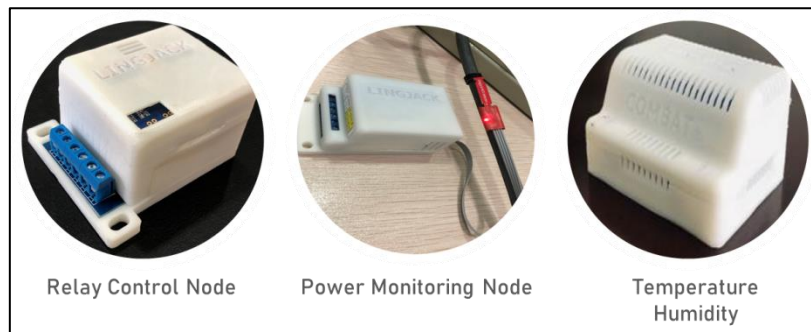
Smart Fail-Safe Features

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





Relay Control Node

Power Monitoring Node

Temperature Humidity



Key Specifications

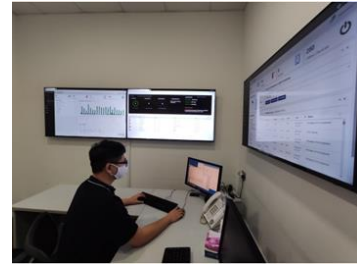
Systems Configuration	Gateway	LAN, Wifi Internet Gateway
	Pump Control Node	2 Pump Control (with connections to 4 tank level probes)
		1 Pump Control (with connections to 4 tank level probes)
	Water Tank Level Indicator Node	Water Tank Level Indicator
	Power Indicator Node	Voltage, Current Monitor
	Temperature 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, Humidity Node 	Overall Dimensions, Weight	~ (L x W x H) 65x46x42 mm, ~ 90g
	Temperature Sensor	Range : -10°C to 85°C, Resolution : 0.1°C, Accuracy : +/- 1°C (Max)
	Humidity Sensor:	Range: 0 to 80% RH, Resolution : +/- 0.1% RH, Accuracy : +/- 5% RH



Standard and Premier Services

Standard and Premier Services

- ✓ Comprehensive Support Services (Monitoring, Alerts, On-site 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

Enquiries:

1 Woodlands Terrace, #03-01
Lingjack Industrial Building,
Singapore 738471
www.lingjack.com

Email: enquiry@lingjack.com
Tel: (65) 67594163

