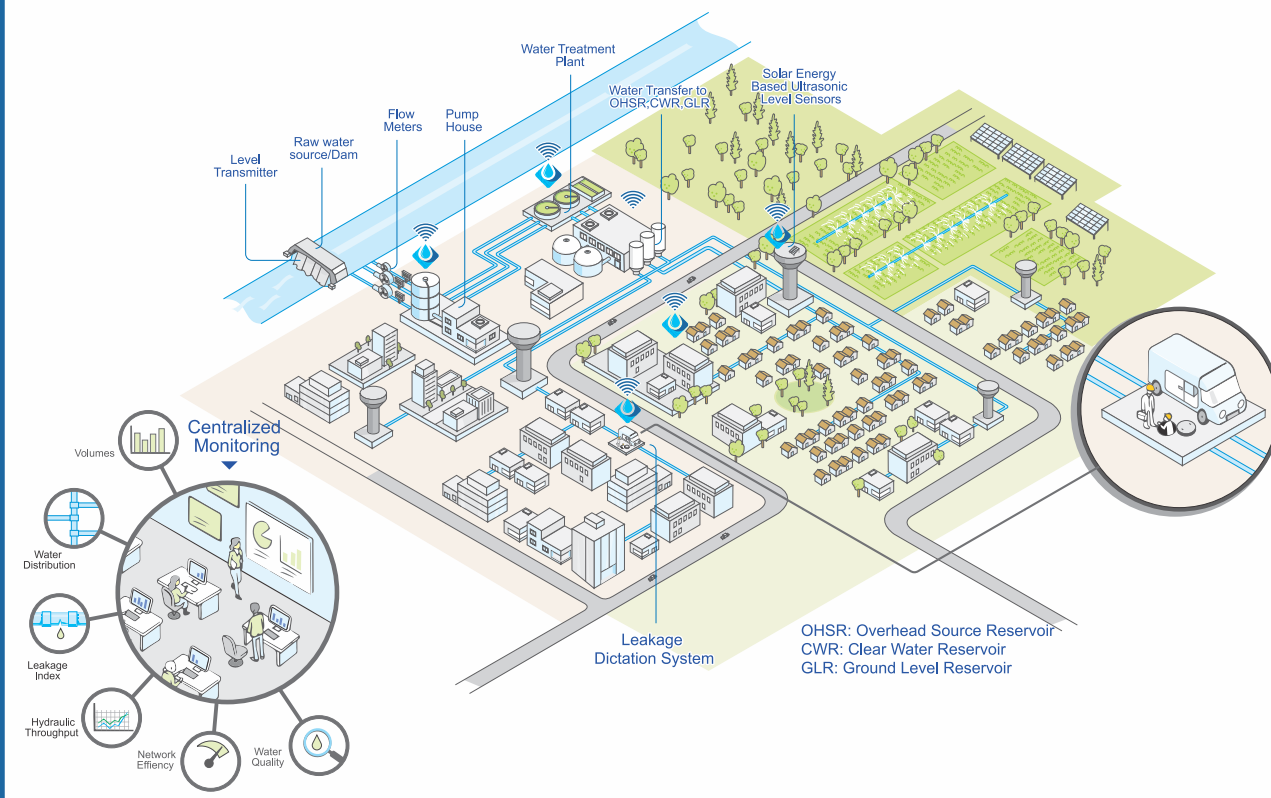


# Integrated Water Management



Integrated Water Management



Integrated Water Management

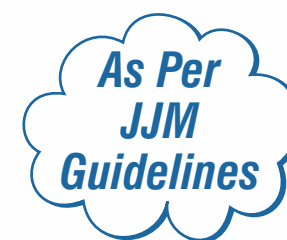


**Desire Energy Solutions Pvt. Ltd.**

📍 401, Manupasana Tower, Near Chomu House Circle,  
C - Scheme, Jaipur (Raj.) INDIA  
☎ 0141-4050855 | Toll Free No.: 1800 180 6010  
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**Works:**

7725/271, New 125,  
Dhanwapur Road, Daultabad Industrial Area,  
Gurgaon -122006



A Complete  
Water Management  
on Your Fingertips

IOT Based RTU/PLC Panel Integrated with Web/App Based Scada System

[www.desireenergy.com](http://www.desireenergy.com)



# ECO-FRIENDLY SERVICES FOR A BETTER TOMORROW

## Company Profile

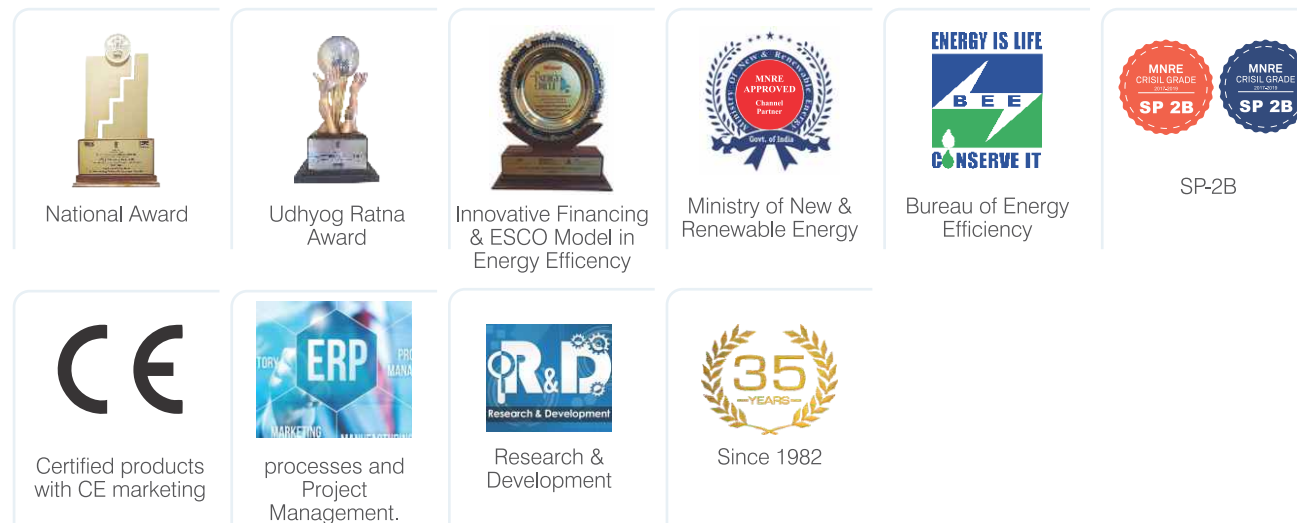
We Desire Energy Solutions Pvt. Ltd., a leading ESCO cum Automation company in the field of Water management and " National Award" winner for outstanding performance in the service sector by Prime Minister Shree Narendra Modi on 16th October 2016, and duly certified by the Bureau of Energy Efficiency (BEE) as a Grade-2 ESCO Company, we have successfully Implemented and executed various ESCO Projects, Water Infra Automation, Solar-Pumps, De-fluoridation units, Community Based RO Plants etc. The company has a dedicated Team of More than 1000+ Experienced and Educated Engineers and Technocrats to support such projects. The details of our projects can be seen at <http://desireenergy.com/>

We have manufactured , Supply & water infra-automation projects for more than 15 major cities like Jodhpur, Bharatpur, Ajmer, Udaipur, Mahesana, Sanand, Deesa, Bikaner, Chittodgarh etc. and also for 6000+ villages in states like Rajasthan, Gujrat and Uttar Pradesh etc.

## Verticals

- ▲ ESCO Projects
- ▲ Water infra Projects
- ▲ Water Treatment
- ▲ Smart Cities
- ▲ SCADA & Automation
- ▲ Solar Pumps
- ▲ Solar Pump Controllers
- ▲ Water Infra EPC Project

## Awards and Recognition



## Aqualogix RTU/IOT GATEWAT

Model No.	AQLX0404 02R	AQLX20040	AQLX20024	AQLX22124	AQLX22140	AQLX24124	AQLX24140
Series	Nimble	Nimble		Nimble		Sharp	
Modem	In-build GPRS Modem	GPRS Modem		GPRS Modem		3G/4G GPRS Modem	
DI	4	24	14	14	24	24	24
DO	4	16	10	10	16	16	16
AI	2	2	2	8	8	16	16
AO	NA	NA	NA	NA	NA	8	8
Fast DI	NA	4		4		8	
Fast DO		2		2		4	
I/O Expansion Module		4		7 (Maximum 7 nos. Add on card can be use)		up to 7	
Memory Capacity	128KB	512 Byte		256KB		8MB	
Data Log	YES	YES		YES		YES	
Data storage capacity	NA	32 GB (Available)		32 GB (Available)		16 GB (Available)	
Communication	SERIAL (2 x RS485, 2 Wire)	SERIAL, ETHERNET, MINI USB		SERIAL,ETHERNET, MINI USB		SERIAL,ETHERNET, MINI USB	
Communication Protocol	serial 232, 485	RTU/ASCII, TCP/IP client/server		RTU/ASCII, TCP/IP client/server		RTU/ASCII, TCP/IP client/server	
USB	1 x Micro USB (Device) for upload/download	USB, Mini B		USB, Mini B		USB, Mini B	
Data Format				Data transfer in API format			
Environmental Specifications & Approvals	0 to 50 °CRelative Humidity: 0 to 95% noncondensing	25...70 Degree ©		25...70 Degree ©		25...70 Degree ©	
Protection Class of Encloser	IP52	IP52/IP54		IP52/IP54		IP54/ IP 65 (Optional)	
Protection	Isolation Transformer, SPD	Isolation Transformer, SPD		Isolation Transformer, SPD		Isolation Transformer, SPD	
Operating Voltage	24V DC	24V DC		24V DC		24V DC	
Inrush Current		35A		35A		35A	
Power Back up	Lithium battery & UPS with 2 Hour Battery Backup	Lithium battery and UPS with 2 Hour Battery Backup		Lithium battery and UPS with 2 Hour Battery Backup		Lithium battery with (2-3) Hour Battery Backup	
Product Certifications (Processor)		CULus, RCM, CSA, IACS E10					
Product Certification (Panel)		CE					
Recommended Application	Suitable for Flow Monitoring & Level Monitoring & Operation	Suitable for Tubewell & ESR Application		Suitable for Stan alone Pumping System			

### Model no. AULX580 (KEEN) Series

GPRS Modem for Data Transferring 3G/4G Modem	
4/8 Channel Back Plat	
4 nos. of racks can be add	
Discrete I/O processor capacity	1024 I/O
Analog I/O processor capacity	256 I/O
Application specific I/O	Accurate time stamping
	Motion control
	Counter
HART and DNP3 Protocol Support (Optional)	
Redundant Processor (Optional)	
Redundant SMPS (Optional)	
SSI encoder	
Serial link:	
Communication module processor capacity	: 2 Ethernet communication module
Ambient air temperature for operation	: 0...60 °C
Relative humidity	: 5...95 % at 55 °C without condensation
Memory description	: Integrated RAM, 4 MB for program
	Integrated RAM, 384 kB for data Expandable flash, 4 GB for data storage

### Panel Specification

Panel certifications: CE	
Ambient temperature in Degree (C)	25...70
Protection Class	IP52/IP54
Isolation Transformer	
SPD (Surge Protection Device)	
Operating Voltage	: 24 VDC
Suitable for Integrated Large scale Pumping System Monitoring and Controlling.	

### Aqualogix Water Information Management System (WIMS) / Web SCADA:-

WIMS Application/web service is designed to receive the data sent by IOT/RMS at defined interval, and allocate the same at designated files in historian, in parallel This Application is also execute near to live data on dash board of the WEB and Mobile Applications or Video walls, for the remote monitoring. Pumps can be operated remotely utilizing Aqualogix mobile application. By utilizing WIMS Application following live data will displayed on dash board of the WEB/Mobile version.

### Model no. AULX580 (KEEN) Series

Configurable Cloud/Web Interface	
Web interface for Configuration remotely	
Configurable Parameters	A Datalogging Interval
	B Live Monitoring interval
	C Cloud Interface
Monitoring Application Dashboard	
Operation of Pumps through Mobile App	
Monitoring Parameters	A. Flow rate & Flow Total/cumulative flow (Through Connected flowmeter with RS-485 Interface)
	B. Pressure (Through connected Pressure transmitter through 4-20 ma interface)
	C. Water Level (Through connected Level transmitter through 4-20 ma interface)
	D. GPRS Signal
	E. Alarms Like Over Voltage, Over Current, Dry Run, Phase imbalance etc. Modem Voltage.
	F. Status (ON/OFF) of Pumps Connected to RMS/IOT
	G. Voltage, Ampere, PF, KW etc of the connected Pumps or Pumping System (Through connected energy meter / multifunction meter with RS-485 Interface)
	H. Power Status on Site
	I. Master Data/specifications/Sr. No./Make etc. of the Installed Pump / Motor / flow Meters and other instrumentation
	J. GPRS Signal Strength
	K. Alarms Like Over Voltage, Over Current, Dry Run, Phase imbalance etc
Notifications based on data analysis	
Analytics & Trends ( Major parameters like KWH/KL, Water Production v/s Distribution ect.) Reports	
Preventive Maintenance schedule and records	
Water Quality Parameter	
Assets Management & Geo tagging	

### Our Major Successful Projects

- ▲ PHED Bharatpur (ESCO Project)
- ▲ PHED Ajmer (Under ESCO Project, 400 Village Water Supply & Monitoring)
- ▲ Rural - Water Supply Scheme, PHED Rajasthan for 3000 village solar pump based
- ▲ Municipality - Mehesana Gujrat
- ▲ Municipality - Sanand Gujrat
- ▲ PHED Jodhpur Rajasthan
- ▲ Rural-Water supply Scheme, UP-Jal Nigam, for 250 Villages





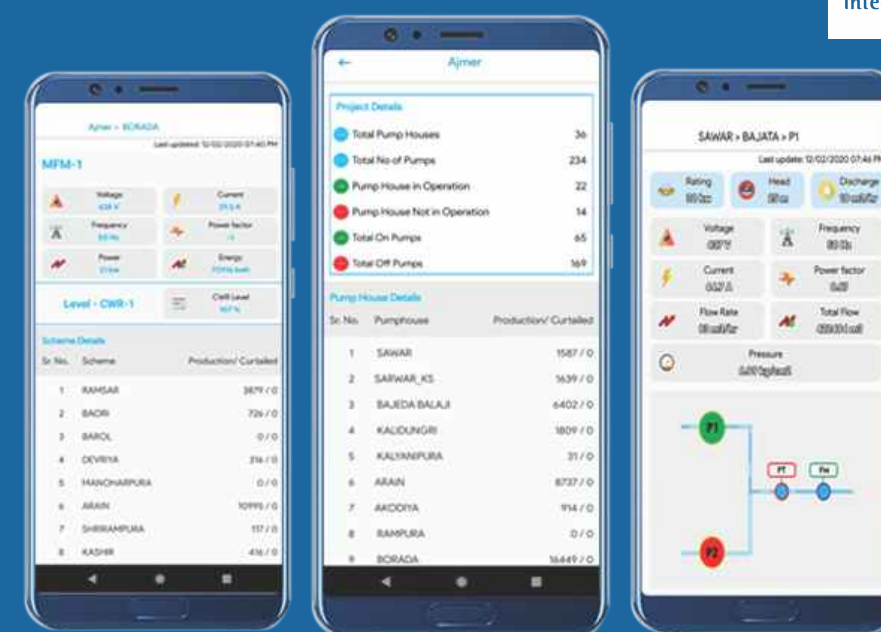
## AquaLogix Make:- IoT based Remote terminal Unit (RTU):-

- AquaLogix IoT based remote terminal unit (RTU) is a microprocessor-based electronic device used for remote monitoring of field devices spread over a larger area by data collecting and transmitting to a central server / Cloud server/ Client Server
- AquaLogix IoT based Remote terminal Unit (RTU) are pre-programed plug and play devices for Particular application.
- AquaLogix IOT Based RTU with Inbuilt GPRS Modern will collect the Information of field Sensors & equipment at defined interval and connect on GPRS Network with a Centralized Server & APIs. The AquaLogix IOT based RTU communicate with API or OPC application through 2G/3G/4G GPRS Network.
- AquaLogix IOT is suitable for all the water applications from Production, Transmission, Treatment, Distribution, Tube wells, ESR etc, this interface with water Infra field instruments like flow meters, Pressure Transmitter, Level Sensor through onboard industrial Grade Analog and Digital Inputs to read the Real-time information.
- Inbuilt Battery Backup
- Also Available with solar based Program System

## Features of Web based SCADA and Mobile Application:-

- Configurable Cloud/Web Interface for Local/Remote Management.  
Configurable Parameters for Data Logging & Live Monitoring (eg: Energy Parameters, Flow Parameters etc.)
- Tree View Dashboard for showing Live data for monitored Parameter (as Head, Discharge, voltage, current, power, frequency, PF, Flow rate, Pressure, Level, etc..)
- Operation of Pumps through Mobile App
- System Notifications & Alarms (eg Over Voltage, Over Current, Dry Run, Phase imbalance etc.)
- Data Analytics through various searches filter options
- Following reports and analytics shall be provided by web version of the application to the authenticated & authorized users.
  - Daily/Weekly/Monthly Productions V/S Power consumption
  - Area wise Water Distribution
  - DMA Wise Water transmission
  - List of faults and alerts
  - KWH/KL Power consumption
  - NRWP Report
- All Reports suitable to export in excel  
Auto Mail to the defined Hierarchy

## MOBILE APPLICATION



Remote Operation  
through Mobile app

Live Data

Alerts/Alarms

## Smart Water Analytics Module

- WIMS application provide various online analytics and statistics reports for the utilization of data stored. Following are the major reports and analytics is provided by web version of the application to the defined users
- Daily / Weekly / Monthly Productions V/S Power consumption
- Area wise Water Distribution
- DMA Wise Water transmission
- List of faults and alerts
- KWH/KL Power consumption
- NRWP Report
- All Reports suitable to export in excel
- Auto Mail to the defined Hierarchy
- Data Analytics for predictive maintenance
- Preventive maintenance schedule to maintenance team
- Tracing & monitoring of maintenance team

## Reports and Analytics of Water Data



## Web SCADA Live Dash Board

## Web SCADA Overview

- Live Monitoring
- Gio Tagging
- Asset Management
- Reports
- AI Based Reports
- Preventive Maintenance Alerts & Reports

