

Multi Feeder Power Analyzer W1020 - W1024



General data gathering system for electrical distribution networks

W1020 is a powerful power analyzer which is able to measure and record the electrical parameters of the circuit breaker and 4 connected feeders. The numbers of feeders are expandable to 16 feeders using W1024 modules.

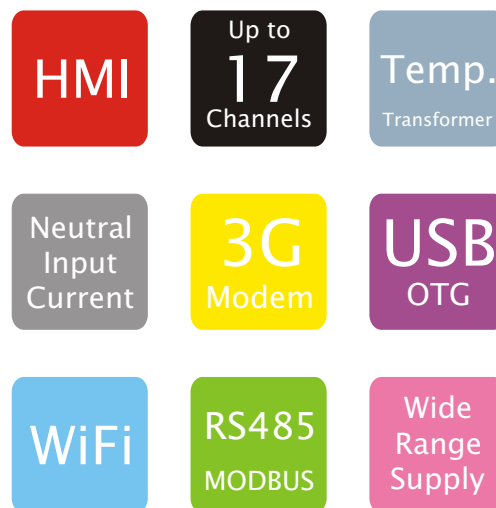
While having the ability to measure and record voltage, current, neutral current, power factor, active, reactive and apparent powers, active and reactive energies for all the feeders, this device can measure and record 2nd to 15th voltage, current and neutral current harmonics, voltages THD and Currents THD for the circuit breaker. Also recording both the environmental temperature and transformer temperature would help to monitor and analyze the effect of harmonic loads.

All the records are stored in the internal memory and transferred to the server using internet.

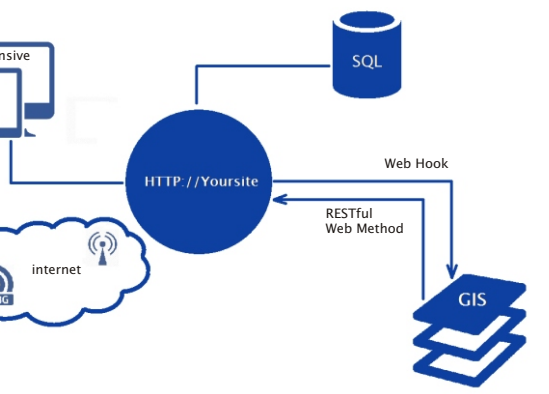
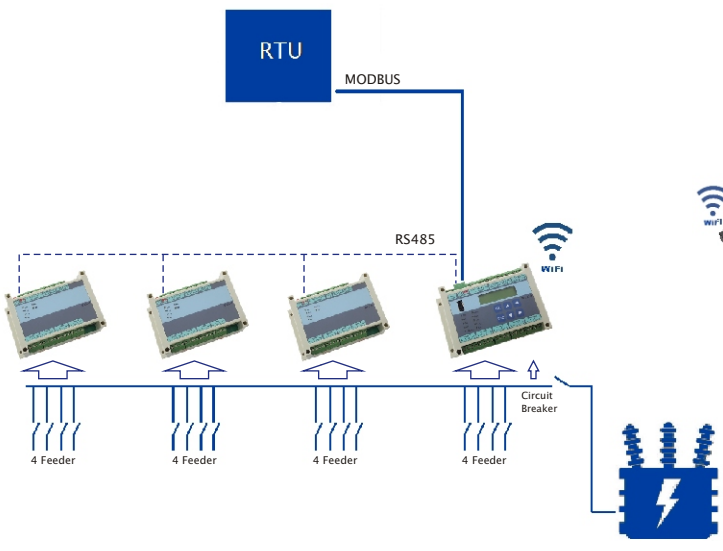
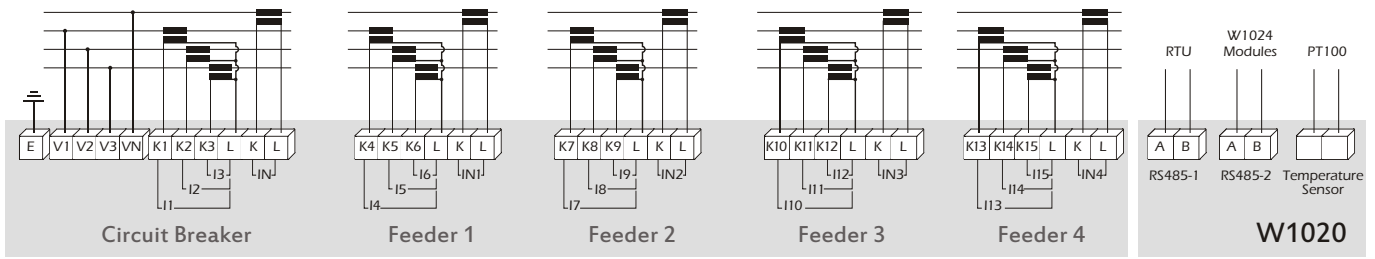
The measured parameters which are transferred to the server by mobile networks make the charts and the data available to be monitored in order to calculate the loss reduction, load balance, load profile, PF correction and etc.

Features (W1020,W1024)	
Measure, Display and Store	
Voltage*	Line Phase Average Unbalance
Current	Line Average Neutral Unbalance
Active Power	Phase Total
Reactive Power	Phase Total
Apparent Power	Phase Total
Power Factor	
Harmonic* Even , Odd	2 to 15 th Line Voltage 2 to 15 th Line Current 2 to 15 th Neutral current
Total Harmonic Distortion*	Line Voltage Line Current
Temperature**	Transformer Ambient
Frequency	
Supported Networks	
CT up to 5000 A	
Data Logging	
Records	1Min to 1 hour Period
Communication	
Offload Stored Data on USB Flash Disk**	
Two RS485**	MODBUS Protocol** Internal Communication
WiFi Module**	
Power Supply	
Wide Range	80-500VAC
Other Features	
Expandable to 16 Feeders	
Current Unbalance Alarm LED	
Fault CT Polarity Correction	
Memory 4GB	
HMI*	2* 16 text LCD 6key
1000 impulse/kwh Energy Pulse	
Daylight Saving	
Software Calibration	
Standard	
Measurement	IEC62053-22 , IEC62053-24
EMC	IEC61439-1 , IEC62271-1
Mechanical Parameters	
Dimension	145*90*72mm
Mounting	DIN rail
Weight	565 gr** 455 gr***
Environment Conditions	
Operating Temperature	-20 to 70°C
Storage Temperature	-30 to 80°C

* Only Main Channel on W1020
** W1020
*** W1024



Features W33	
General Specification	
Supported Networks	3G, EDGE, GPRS
WiFi	IEEE 802.11b/g/n
Antenna	Internal
Internal Backup Battery	
Supply	80-280 VAC
Mechanical Parameters	
Dimension	120*58*32mm
Weight	180 gr
Environment Conditions	
Operating Temperature	-20 to 50°C
Storage Temperature	-25 to 60°C



Data gathering and recording system

General specification

Gathering the transferred data from the device and recording in the SQL server database
 Display and managing the general information of each device containing name, code, address and etc. while distinguishing the station and feeder

- Applicable filtering to display the desired stations
- Display the records received for each station and it's feeders
- Export Excel files from the records of each station and it's feeders
- Export screen shots of the analyses in order to be used in the reports
- Display the profile of all parameters for each station and it's feeders
- Display the profile of max, min and average of all parameters for each station and it's feeders
- Define access level for different users
- Using Web Method and RESTful in order to receive data from the website
- Web Hook capability
- Responsive design
- Compatible with all modern web browsers

Data analysis by the software

- Operation factor
- Load factor
- Capacitor calculation
- Unbalance calculation
- Load profile
- Peak time
- Total load of selected devices
- ...

Capability to make alarms by the website

- Station blackout alarm
- Fuse burning alarm
- Overload alarm
- Current harmonic alarm
- Transformer overheat alarm
- Simcard credit balance alarm
- Customize alarms

Serial	In	Substation Code	Substation Name	Address	Group
1	100M7803432	1200	10216	پست سهند ملایر	ایجاد
2	100M7803667	400	10283	پست آمل	ایجاد
3	100M7821148	630	10195	پست مجتمع کازرون	ایجاد
4	100M7819427	400	10122	پست T شرقی کازرون	ایجاد
5	100M7810590	400	10443	پست آملی کازرون	ایجاد
6	100M7800521	1000	10664	پست انار	ایجاد
7	100M7881363	400	10413	پست کاشانی ها	ایجاد
8	100M7800369	630	50360	پست شیخ آباد	ایجاد
9	100M7810809	630	50306	پست باقرآباد	ایجاد
10	100M7800324	400	50332	پست زاربان	ایجاد

