



**MiSMART**  
Instrument remote monitoring

**MiQEN**  
Instrument settings & analysis

## SITE ENERGY MONITORING SOLUTION

- **RELIABLE OPERATION** AS WELL AS EQUIPMENT MAINTENANCE
- GAS/WATER CONSUMPTION **MONITORING**
- **CONTROL OVER POWER CONSUMPTION AND LOSSES**
- ELECTRIC ENERGY **MONITORING**
- BETTER **EQUIPMENT INVESTMENT PLANNING**
- **ELECTRICAL POWER QUALITY** DATA MONITORING
- **BETTER CONTROL** OVER THE INSTALLED EQUIPMENT

# MiSMART

Instrument remote monitoring

**SYSTEM  
SERVER  
(LOCAL OR  
REMOTE)**

DATABASE

WEB  
SERVER

DATA  
COLLECTOR

REMOTE  
SYSTEM  
DATA  
MONITORING



**ELEC  
M**



**LAN  
SERIAL  
LPR**

**GAS/WATER/ELECTRICITY  
METER POINT**

**REMOTE GAS/WATER  
METER POINT**

**REMO  
DEVI  
SETTING &**



WEB CLIENTS

POWER QUALITY METER POINT

ELECTRICAL ENERGY METER POINTS

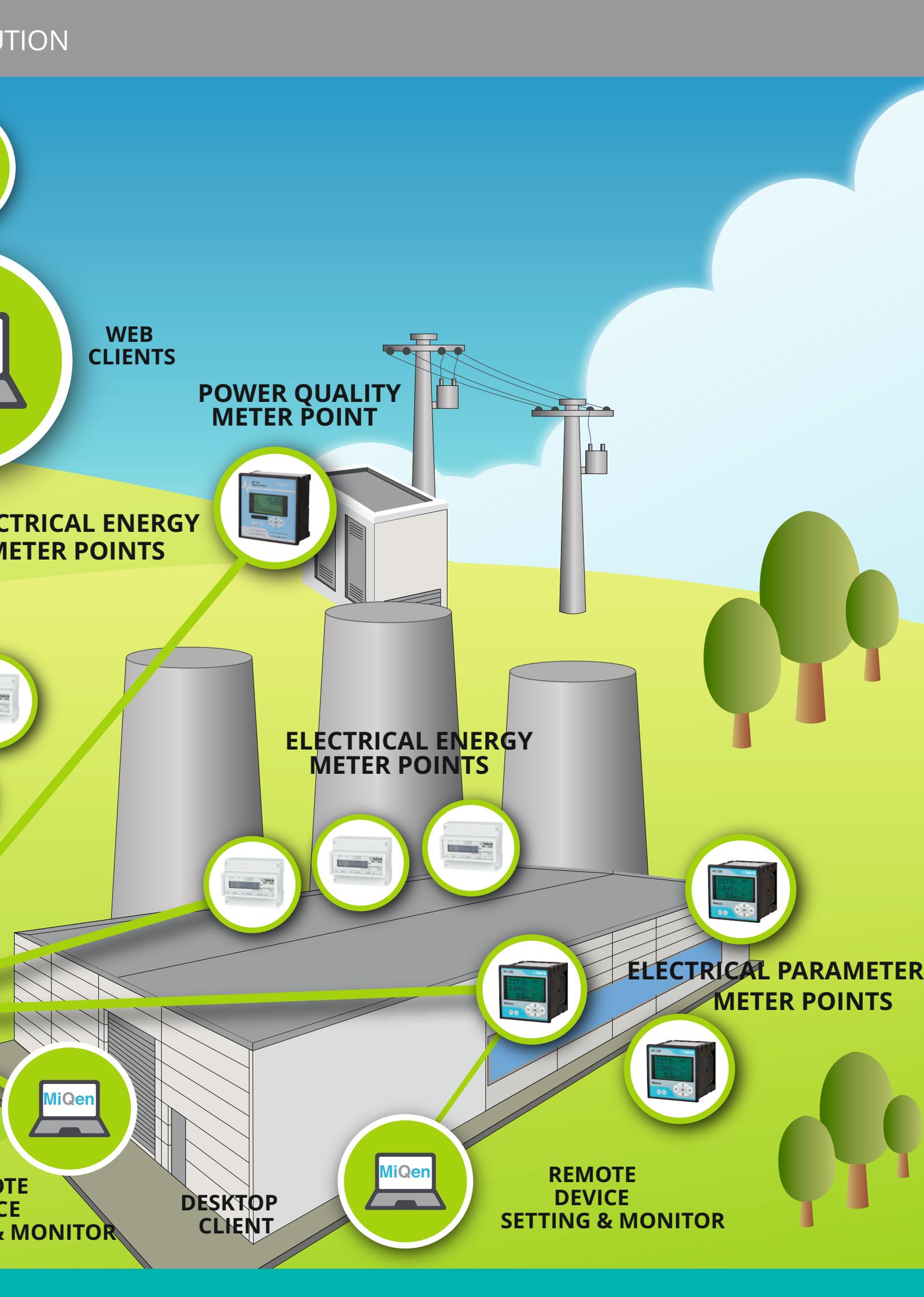
ELECTRICAL ENERGY METER POINTS

ELECTRICAL PARAMETER METER POINTS

NOTEBOOK & MONITOR

DESKTOP CLIENT

REMOTE DEVICE SETTING & MONITOR



# SOLUTION OVERVIEW & SYSTEM COMPONENTS

## SOLUTION OVERVIEW & BASIC BENEFITS

THIS SOLUTION PROVIDES ALL NECESSARY MEANS FOR EQUIPPING YOUR FACTORY OR BUSINESS TO HAVE ALL RELEVANT ENERGY RELATED DATA ALWAYS CENTRALLY AVAILABLE FOR MONITORING AS WELL AS FOR BASIC DATA ANALYSIS. ENERGY RELATED DATA CAN NOW ALWAYS BE AVAILABLE AT THE TIP OF YOUR HANDS. THE SOLUTION CAN ASSURE SOME CRUCIAL ADVANTAGES IN YOUR COMPANY SUCH AS:

- **CONSTANT ELECTRIC ENERGY MONITORING** AT DIFFERENT SITES WITHIN THE COMPANY
- **CONSTANT GAS/WATER CONSUMPTION MONITORING** AT DIFFERENT SITES WITHIN THE COMPANY
- **CONTROL OVER POWER CONSUMPTION** AND LOSSES WITHIN THE COMPANY
- **MORE RELIABLE OPERATION** AS WELL AS EQUIPMENT MAINTENANCE
- **BETTER EQUIPMENT INVESTMENT PLANNING BASED** ON HISTORIC CONSUMPTION AND PQ DATA
- ELECTRICAL POWER QUALITY **DATA MONITORING**
- **BETTER CONTROL** OVER THE INSTALLED EQUIPMENT

## SYSTEM COMPONENTS

### MEASURING EQUIPMENT:

- **COMPATIBLE** WITH ALL ISKRA INSTRUMENTS (ENERGY METERS, MEASURING CENTERS, DATA LOGGERS FOR EQUIPPING EXISTING GAS/WATER/ELECTRICITY METERS)
- **SUPPORTS THIRD PARTY INSTRUMENTS/METERS** WITH MODBUS OR PULSE INTERFACE
- **PERIODIC ENERGY CONSUMPTION MONITORING** OR MONITORING OF UP TO 128 ELECTRICAL MEASUREMENT WITH 1 TO 60 MINUTE RESOLUTION
- **UP TO 32** PROGRAMMABLE ALARMS
- **INPUT/OUTPUT DIGITAL** OR ANALOG MODULE OPTION
- **POWER QUALITY ANOMALIES** AND REPORTS ACCORDING TO EN50160
- **ALL INSTRUMENTS SUPPORT MODBUS** (SERIAL OR TCP/IP) OR PULSE INPUTS (DATA LOGGERS)

### COMMUNICATION EQUIPMENT:

- **THE SOLUTION CAN TAKE ADVANTAGE OF ALL EXISTING COMMUNICATION INFRASTRUCTURE TO MINIMIZE COSTS** (LAN, CELLULAR NETWORK, SERIAL NETWORK, ...)
- **REMOTE WATER/GAS/ELECTRICITY CONSUMPTION DATA** CAN BE PROVIDED FROM REMOTE LOCATIONS EQUIPPED WITH DATA LOGGER COMMUNICATORS COMMUNICATING OVER SMS/GPRS/LPR

### SOFTWARE:

- **MiQEN 2.1 CONFIGURATION STUDIO SW**
  - SETTING UP INSTRUMENTS LOCALLY OR REMOTELY
  - PARTICULAR DEVICE LOCAL OR REMOTE MONITORING OF HISTORIC VALUES FOR MEASUREMENTS, ALARMS AND PQ DATA
  - PARTICULAR DEVICE LOCAL OR REMOTE BASIC DATA ANALYSIS
- **MiSMART SYSTEM SW**
  - 3-TIER WEB BASED SYSTEM INFRASTRUCTURE FOR COMPLETE SYSTEM DATA & OPERATION MONITORING
  - CENTRALIZED DATABASE WHERE ALL CONFIGURED INSTRUMENT DATA IS AVAILABLE
  - CAN BE INSTALLED ON A COMPANY LOCAL SERVER OR IN THE CLOUD
  - COMPLETE SYSTEM MONITORING STATISTICAL EVALUATION OF HISTORIC MEASUREMENTS, ALARMS AND PQ DATA WITHIN THE DATA MONITOR MODULE
  - SYSTEM SETTINGS ARE DONE THROUGH THE CONFIGURATION TOOL MODULE
  - MULTIPLE DATA EXPORT CAPABILITIES FOR FURTHER DATA PROCESSING IN OTHER SYSTEMS (PQDIF, EXCEL)



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