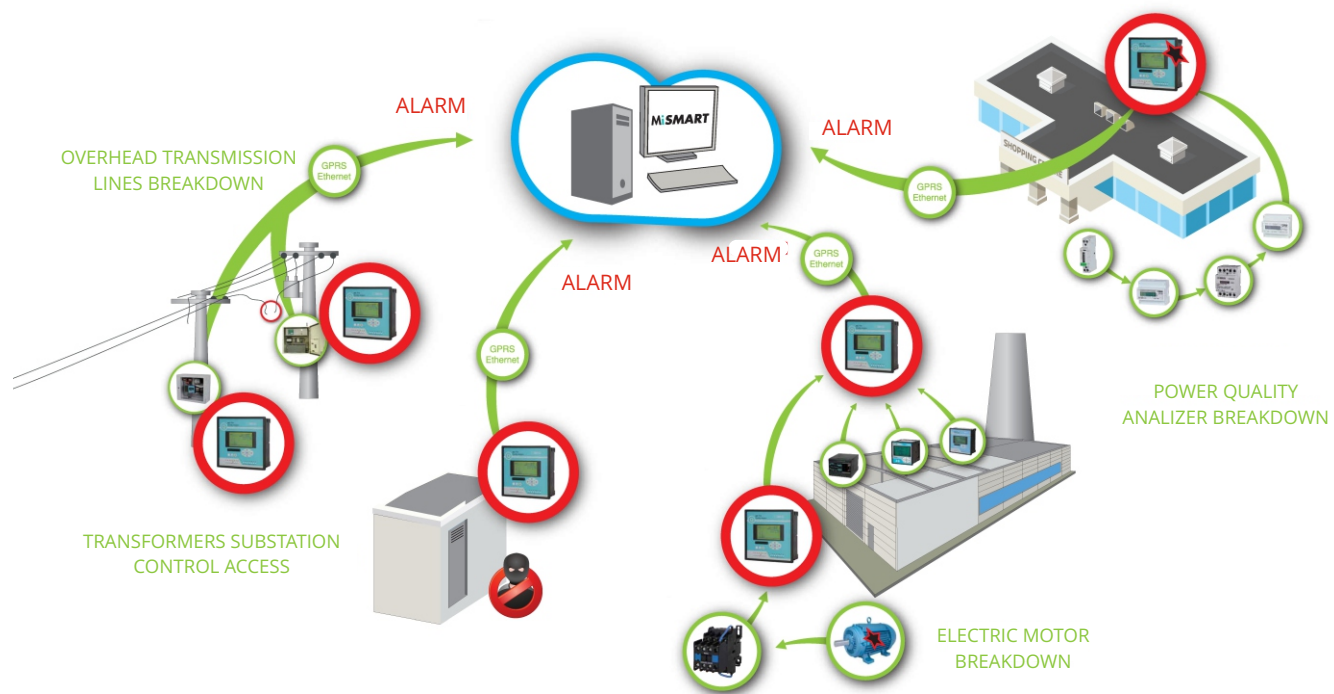
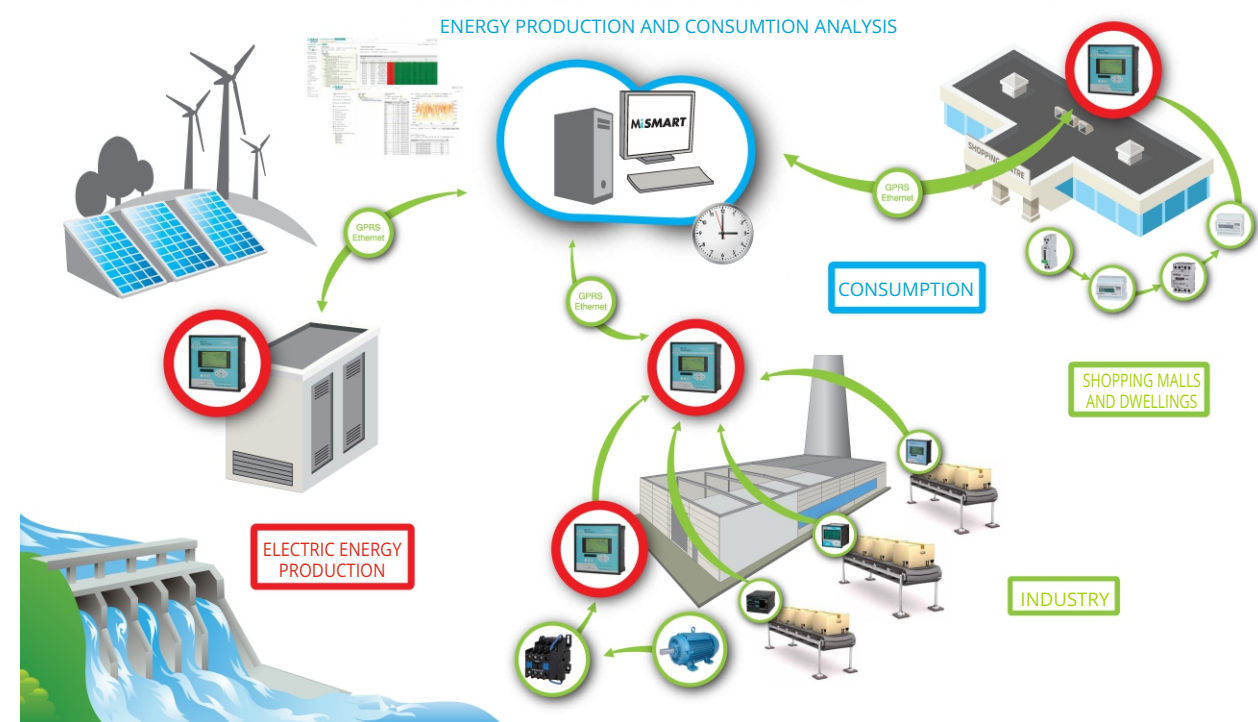


ALARMS



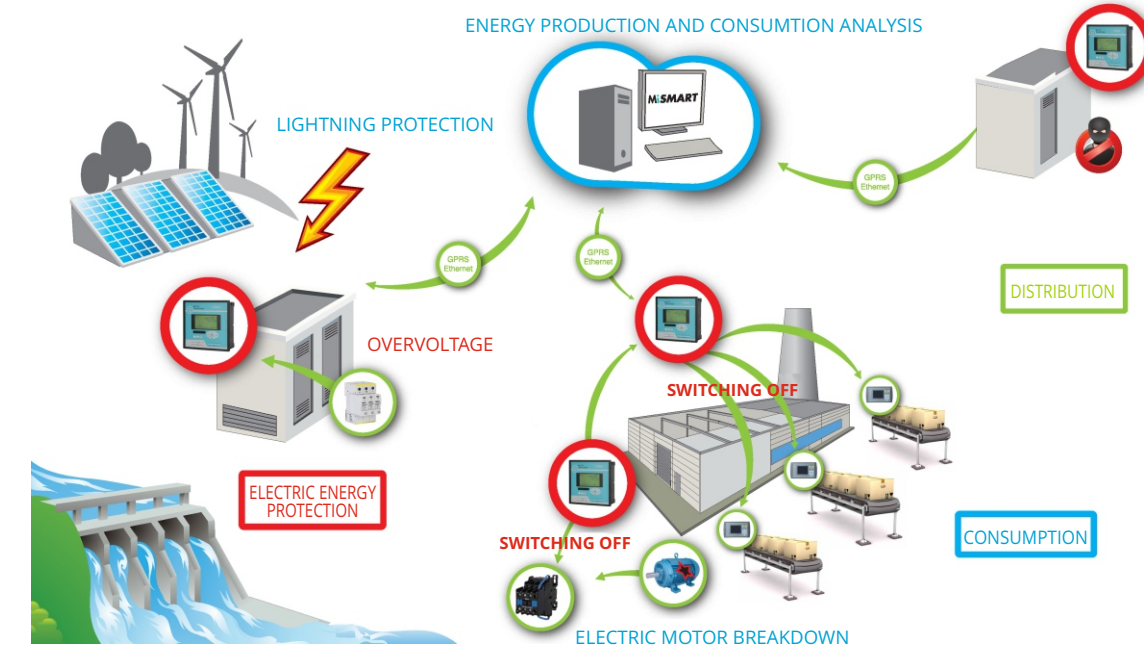
- POWER QUALITY ANALYZER FUNCTIONS ALSO AS A SECONDARY PROTECTION DEVICE
- UP TO 32 ALARMS
- FAST NOTIFICATION OF FAULTS IN A SYSTEM
- CAN BE VIEWED ON DEVICE OR DOWNLOADED

ENERGY



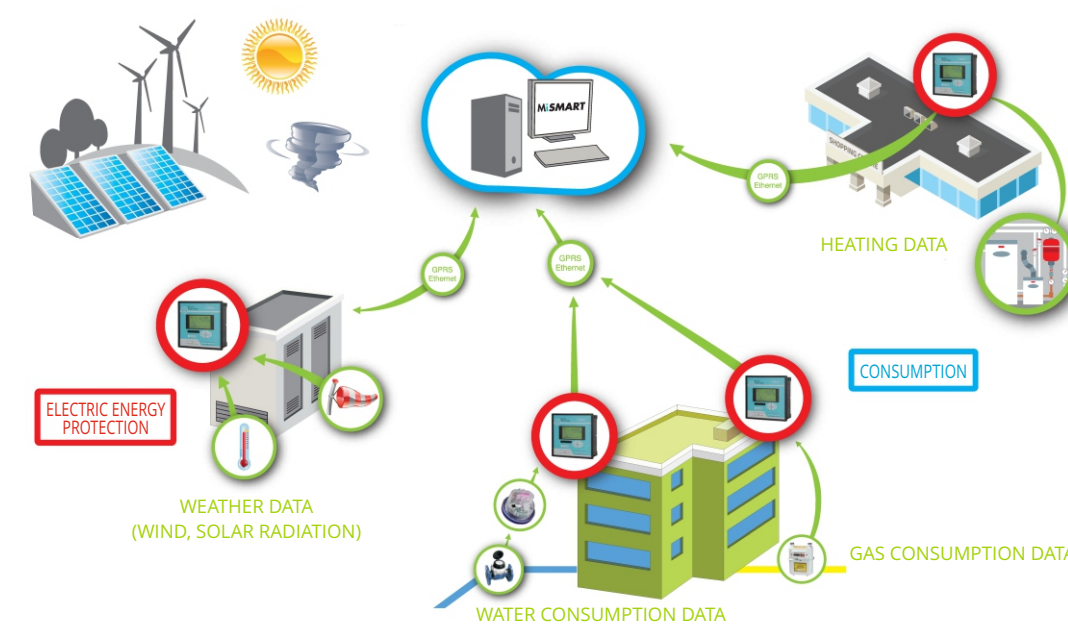
- HIGH ACCURATE DATA ABOUT CONSUMPTION
- FOR ENERGY COUNTERS FOR FOUR-QUADRANT METERING

CONTROL



- INPUT SIGNALS OF PLC
- OVERVOLTAGE PROTECTION
- SUBSTATION CONTROL ACCESS

AUXILIARY INPUTS



- MEASUREMENT OF WATER; HEAT; GAS ETC. CONSUMPTION
- MEASUREMENT OF SOLAR RADIATION, TRANSFORMER STATION TEMPERATURE; WIND SPEED, ETC.



ISKRA MC 774 POWER QUALITY CLASS A ACCURACY CERTIFIED

- RELEVANT FOR POWER QUALITY MONITORING DEVICES FOR THE DETECTION OF LOCAL POWER QUALITY DEVIATIONS.



POWER QUALITY PARAMETERS AT YOUR PALM

EN 50160 VOLTAGE QUALITY EVALUATION

USER FRIENDLY SETTING AND ANALYSIS SOFTWARE MiQen

MONITORING DETECTION OF POWER QUALITY DEVIATIONS (MISMART, MIQEN SOFTWARE SOLUTION)

WEB BASED 3-TIER CENTRALISED DISTRIBUTED INSTRUMENT DATA MONITORING SOFTWARE MISMART

SUPPORT FOR GPS, IRIG-BAND NTP REAL TIME SYNCHRONISATION

UP TO 20 I/O MODULES (ANALOGUE IN/OUT, PULSE IN/OUT, ALARM/WATCHDOG, TARRIF IN)

WIDE RANGE INPUT AND OUTPUT MODULES (COMPETITIVE PRODUCTS IN MOST CASES „ONLY“ VOLTAGE QUALITY ANALYZERS)

MULTILINGUAL SUPPORT (MENUS IN 15 LANGUAGES)

HIGH ACCURACY - CLASS A MEASUREMENTS (CERTIFIED BY PSL - POWER STANDARDS LAB)

MEASUREMENTS OF INSTANTANEOUS VALUES OF MORE THAN 140 QUANTITIES INCLUDING HARMONICS, FLICKER, POWER LINE SIGNALLING VOLTAGE, UNBALANCE ...

WIDE VARIETY OF REAL TIME SYNCHRONIZATION OPTIONS

VOLTAGE AND CURRENT AUTO RANGE MEASUREMENTS UP TO 1000 V RMS, 12.5 A

4 VOLTAGE AND 4 CURRENT CHANNELS WITH 32 ms SAMPLING TIME

WIDE FREQUENCY MEASUREMENT RANGE 16 - 400 Hz

UP TO THREE INDEPENDENT COMMUNICATION PORTS (SERIAL, ETHERNET AND USB COMMUNICATION)

MODBUS AND DNP3 COMMUNICATION PROTOCOLS



Iskra, d.d. Stegne 21 SI-1000 Ljubljana, Slovenia

Phone: +386 1 513 10 00 www.iskra.eu



VOLTAGE QUALITY EVALUATION

PHENOMENA	PQ PARAMETERS
FREQUENCY VARIATIONS	FREQUENCY DISTORTION ✓
VOLTAGE VARIATIONS	VOLTAGE FLUCTUATION ✓ VOLTAGE UNBALANCE ✓
VOLTAGE CHANGES	RAPID VOLTAGE CHANGES ✓ FLICKER ✓
VOLTAGE EVENTS	VOLTAGE DIPS ✓ VOLTAGE INTERRUPTIONS ✓ VOLTAGE SWELL ✓
HARMONICS & THD	HARMONICS ✓ INTERHARMONICS ✓ SIGNALLING VOLTAGE ✓

Yes!
AUTOMATIC EN 50160
REPORT GENERATION

TECHNICAL DATA

MEASUREMENT INPUTS

NOMINAL FREQUENCY RANGE	50-60 Hz
MEASURING FREQUENCY RANGE	16 - 400 Hz

CURRENT MEASUREMENTS

NUMBER OF CHANNELS	4
SAMPLING RATE	31 kHz
NOMINAL VALUE (I _{NOM})	1 A, 5 A

VOLTAGE MEASUREMENTS

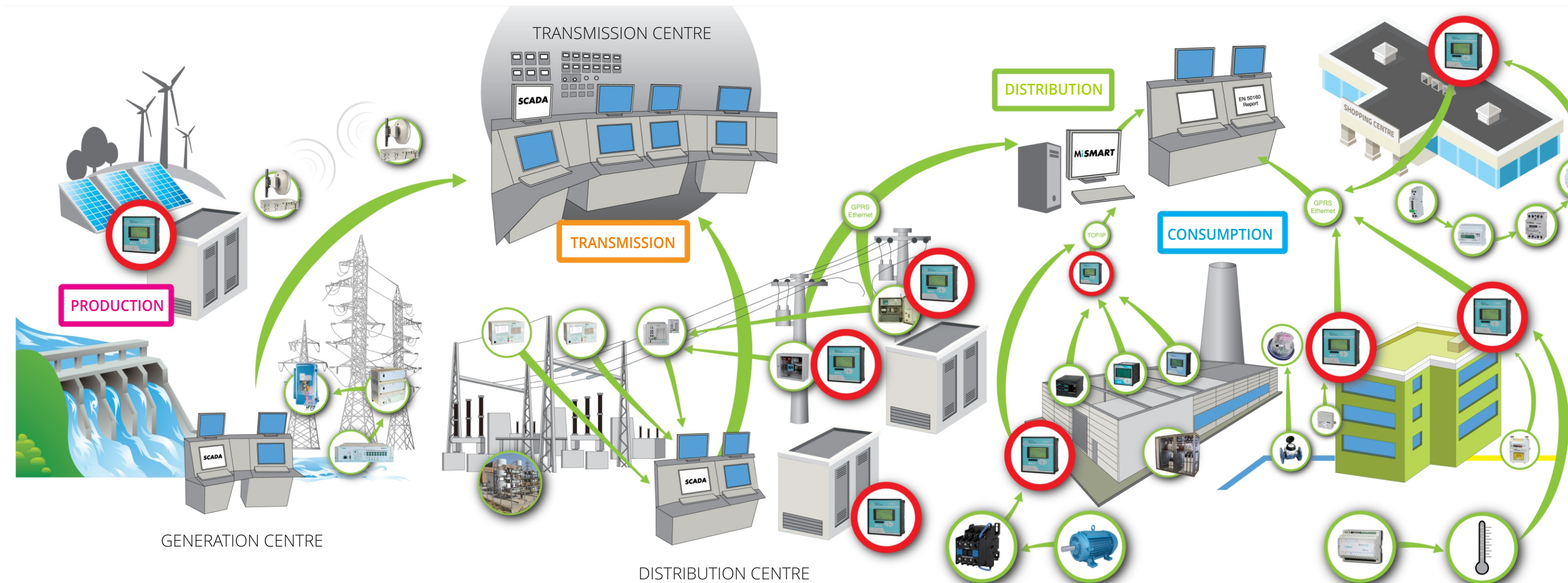
NUMBER OF CHANNELS	4 ⁽¹⁾
SAMPLING RATE	31 kHz
MIN. VOLTAGE FOR SYNC.	1 V _{rms}
NOMINAL VALUE (U _N)	500 V _{LN} ; 866 V _{LL}

⁽¹⁾ 4th CHANNEL IS USED FOR MEASURING U_{EARTH NEUTRAL}

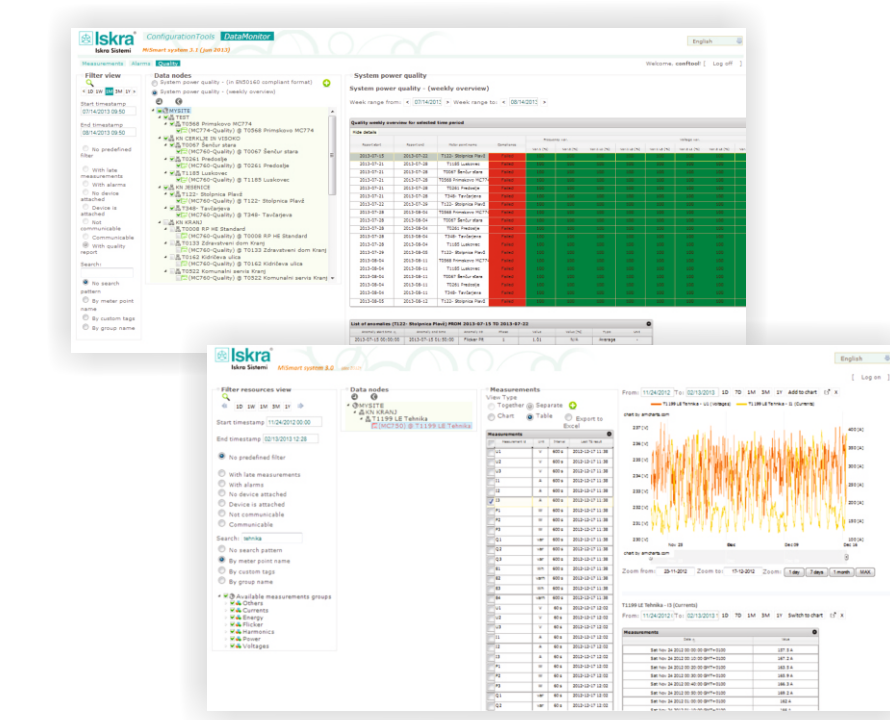
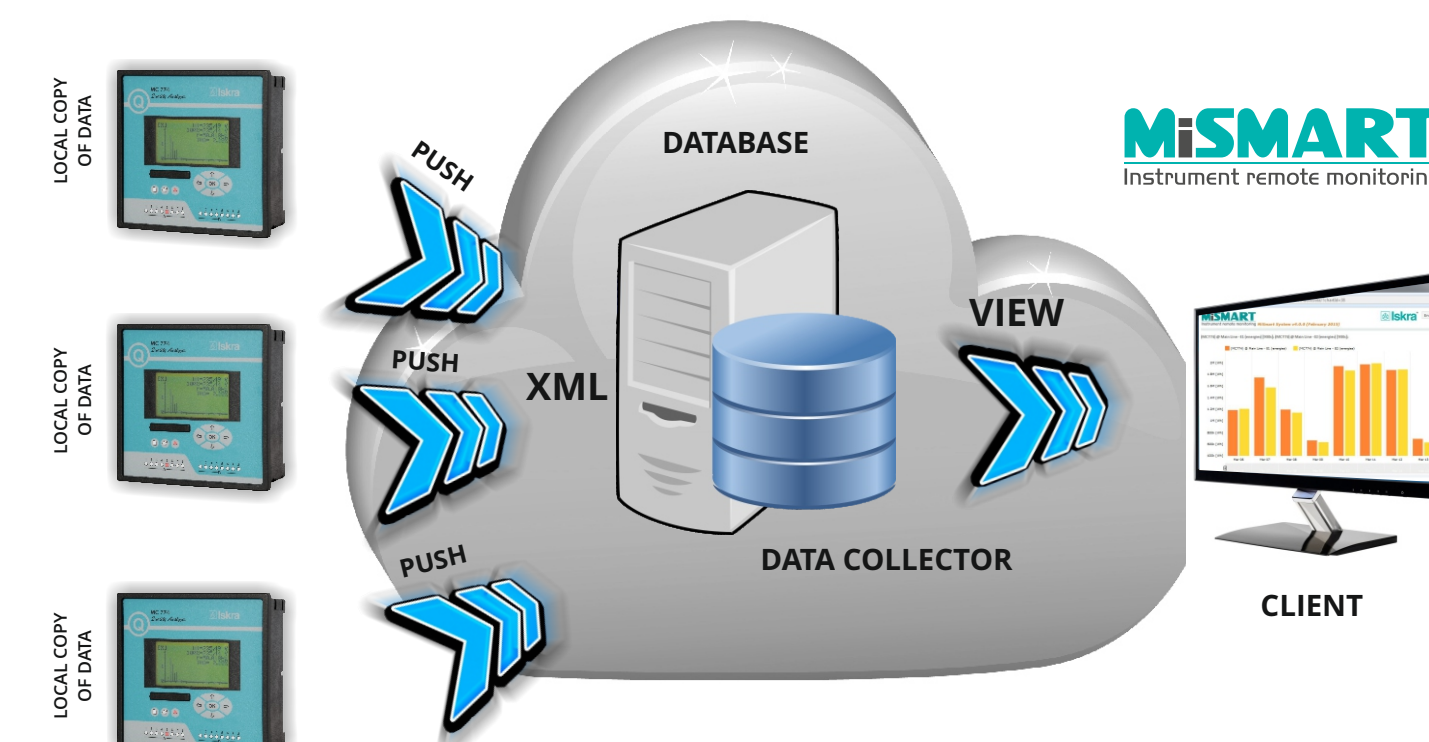
BASIC ACCURACY

MEASURAND	ACCURACY
VOLTAGE L-N, L-L	± 0.1% ACC. TO EN 61557-12
CURRENT	± 0.1% ACC. TO EN 61557-12
ACTIVE POWER (I _N = 5 A)	± 0.2% ACC. TO EN 61557-12
ACTIVE POWER (I _N = 1 A)	± 0.5% ACC. TO EN 61557-12
ACTIVE ENERGY	CLASS 0.2S ACC. TO EN 62053-22
REACTIVE ENERGY	CLASS 2 ACC. TO EN 62053-23
FREQUENCY (f)	± 0.01 Hz ACC. TO EN 61557-12
POWER FACTOR (PF)	± 0.5% ACC. TO EN 61557-12
THD (U)	± 0.3% ACC. TO EN 61557-12
THD (I)	± 0.3% ACC. TO EN 62053-22
REAL TIME CLOCK (RTC)	< ± 1s / DAY ACC. TO EN 61000-4-30

THE QUALITY ANALYZER CAN BE USED IN ELECTRICITY (DISTRIBUTION AND TRANSMISSION SUBSTATION) AND INDUSTRIAL (PRODUCTION AND INDUSTRIAL ENERGY CONSUMPTION) SEGMENTS BOTH AT LOW-VOLTAGE AND MEDIUM-VOLTAGE LEVELS.



3-TIER MIDDLEWARE



- DATA ACQUISITION & ANALYSIS
- THREE ARCH ARCHITECTURE
- REAL TIME ALARM MANAGEMENT
- DATA ACCESS ADMINISTRATION
- POWER QUALITY REPORTS
- GRAPHICAL MONITORING