

Power Quality Analyzer

Die schnellste Analyse elektrischer Versorgungsnetze

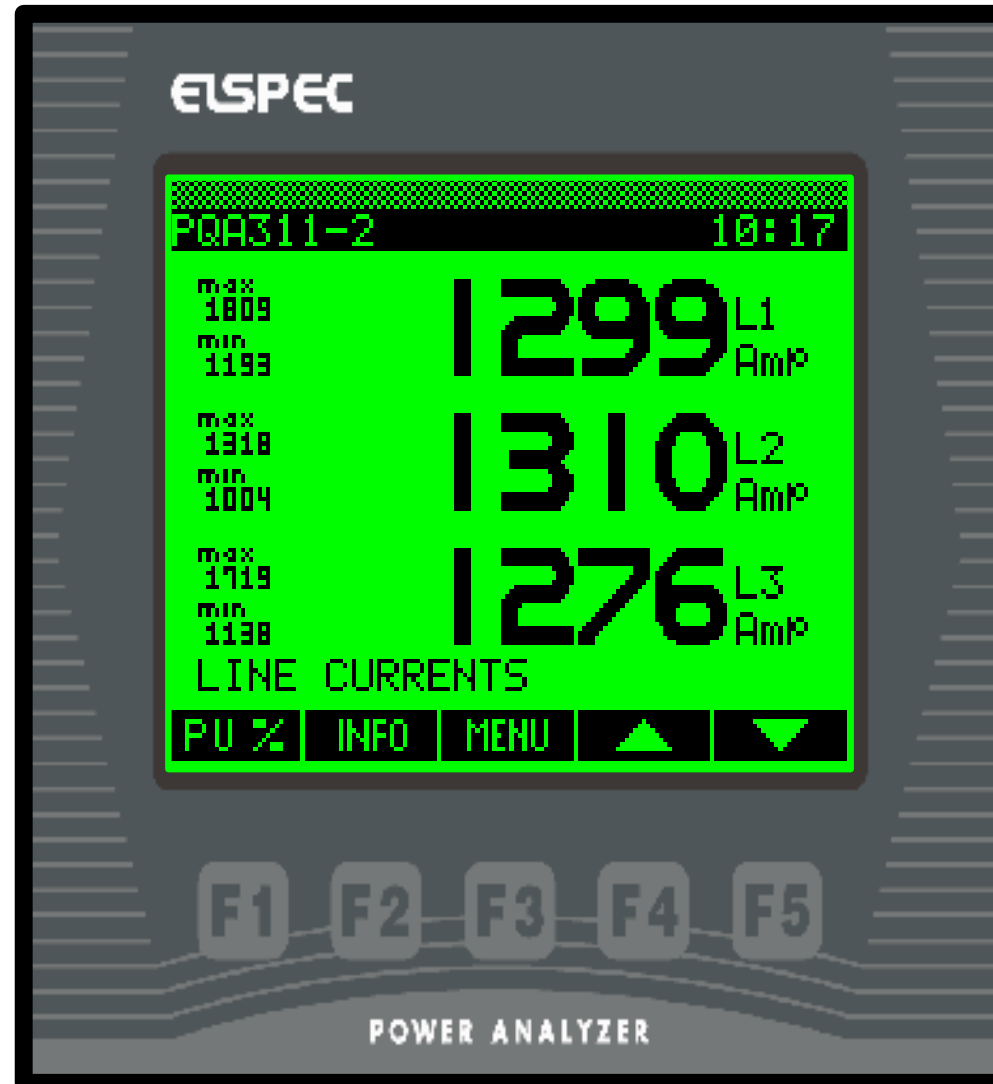
Vortrag von Dipl.Ing. Hermann Kirschner, GHK GmbH



Power Quality Analyzer PQA

- **Sehr schnelle Analyse elektr. Netzwerke, Messung in jeder Periode**
- **Hoch auflösendes LCD Display (127 mm) mit Beleuchtung**
- **Messung und Anzeige von Strom und Spannung im Nullleiter**
- **Oberwellenanalyse bis zur 63. Harmonischen**
- **Datenlogger, eingebauter Speicher flash bis 2 Mbyte**
- **Analyse des Speisetransformators**
- **Anzeige der Netzqualität nach intern. Normen**
- **Benutzerfreundliche PC-Software PowerIQ**
- **Auswahl isolierter Analog- und Digital-Ein/Ausgänge**
- **Industrieübliche Kommunikationsprotokolle**
- **Bedienung menügeführt**
- **Einfache Installation, Konfiguration und Handhabung**

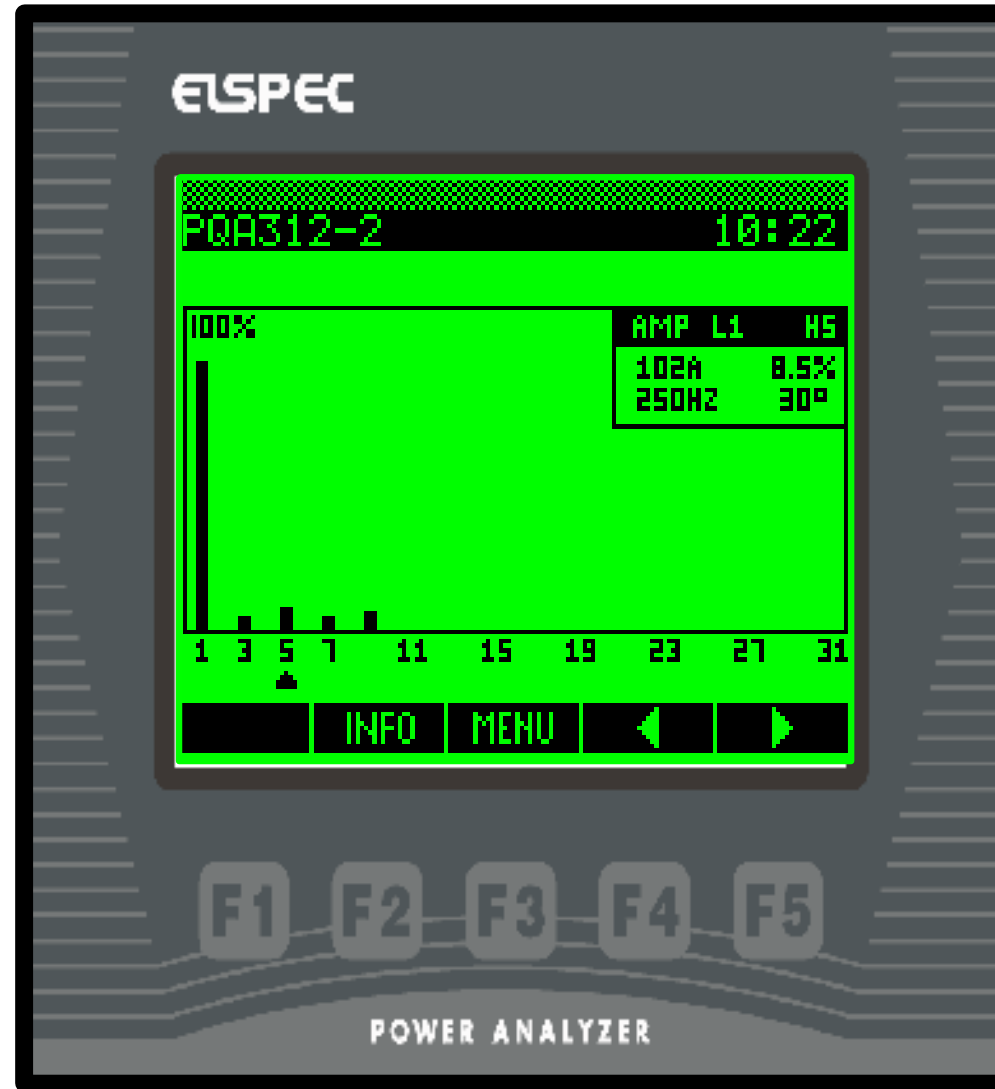
PQA Anzeige große Ziffern



PQA Anzeige Oszilloskop

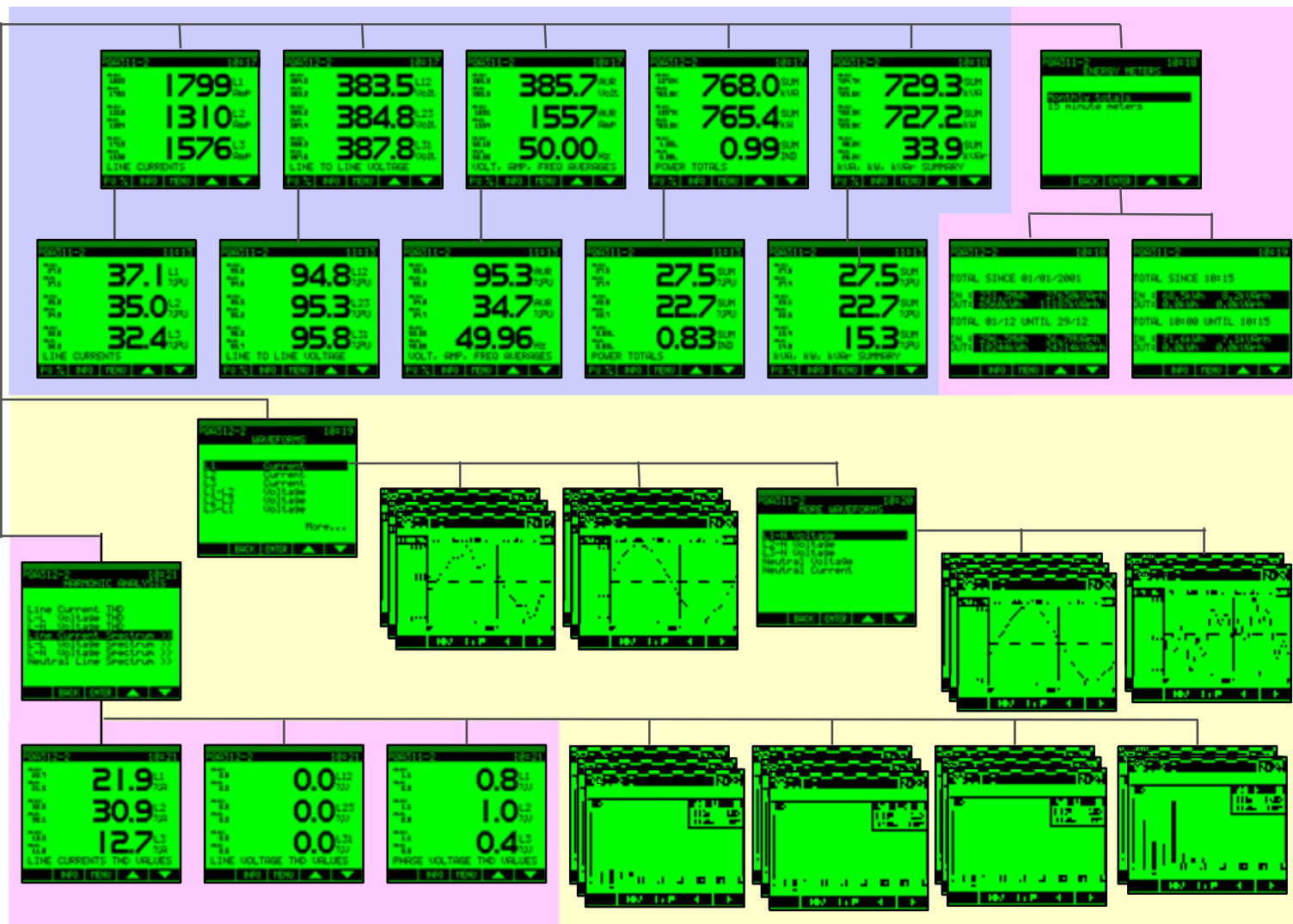


PQA Anzeige Oberwellen



PQA Anzeigen, Menüs

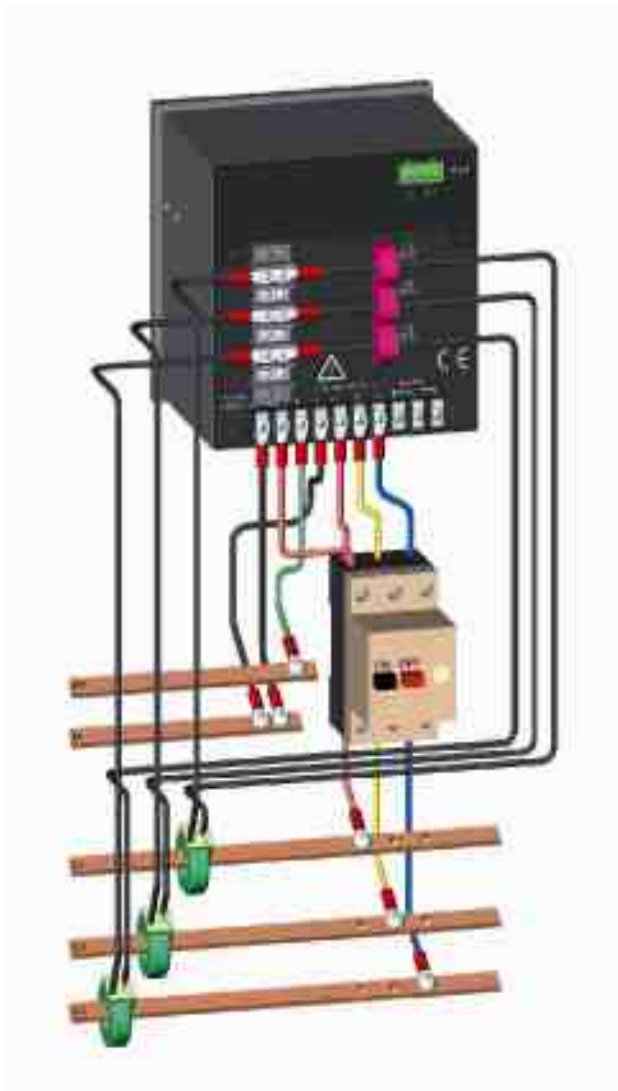
Main Menu



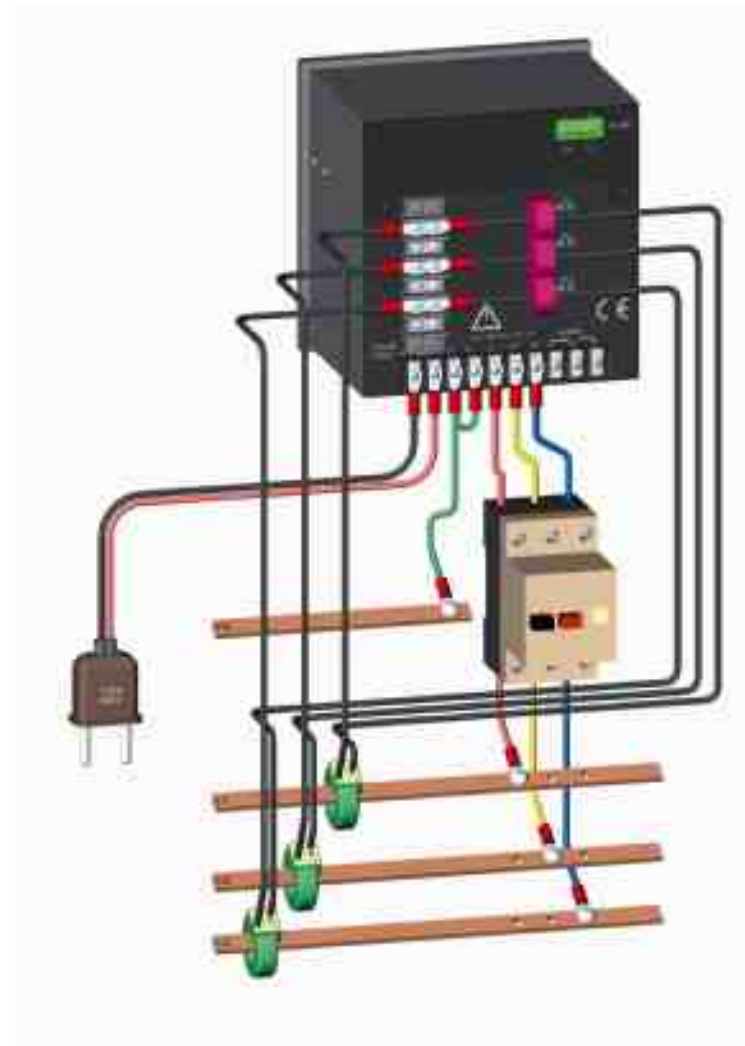
MEASUREMENT LEVEL

- 1
- 2
- 3
- 4

PQA Anschluss



5-Leiter-Netz



3 Leiter-Netz mit Erde

PQA 205 portabler Power Quality Analyzer

Power Quality Experts



Power IQ Computer Software

Power Quality Experts

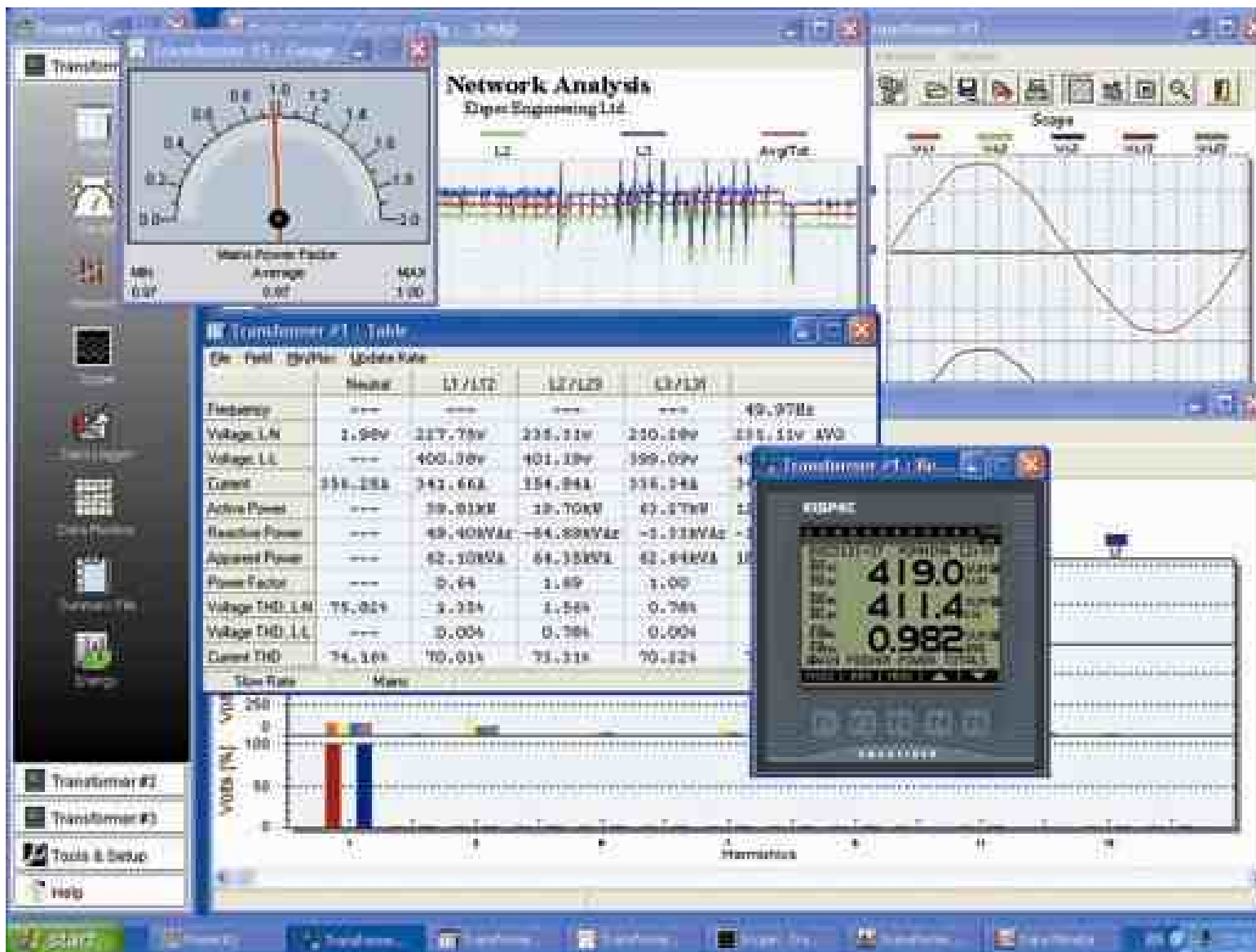
The screenshot displays the Power IQ software interface with several key components:

- Unit1: Min/Max since today at 10:51:57** (Table):

		L1/L12	L2/23	L3/L31	Σ/Avg.
V Ph	V	225.8	226.2	225.9	226.0
V Line	V	390.9	391.3	391.6	391.3
I	A	1348	1454	1340	1381
P	kW	289.2	289.6	290.3	868.9
Q	kVar	95.0	96.7	96.9	288.6
S	kVA	194.9	195.2	195.4	194.9
P.F.		0.95L	0.95L	0.95L	0.95L
Freq.	Hz	50.0	50.0	50.0	50.0
THD Vph	%	1.4	1.3	1.5	1.4
THD Vln	%	1.4	1.5	1.5	1.5
THD Cur	%	11.2	11.7	11.5	11.5
- Data Logger Scope**: Shows a waveform graph for current (I) over time, with phases L1, L2, and L3, and an average (Avg) line. The y-axis ranges from 300 to 227.5.
- Harmonic Graph**: A bar chart showing harmonic content for phases L1, L2, and L3. The y-axis is labeled 'Amplitude' and ranges from 0 to 1200. The x-axis is labeled 'Harmonics' and ranges from 1 to 31. Specific values are noted: L1-T=0.240, L2-T=0.247, L3-T=0.248.
- Gauges**: At the bottom, there are three analog-style gauges for phase voltages: V phase L1 (225.80), V phase L2 (226.20), and V phase L3 (225.80).

Power IQ Fernsteuerung und -messung

Power Quality Experts



Power IQ Messung in Echtzeit

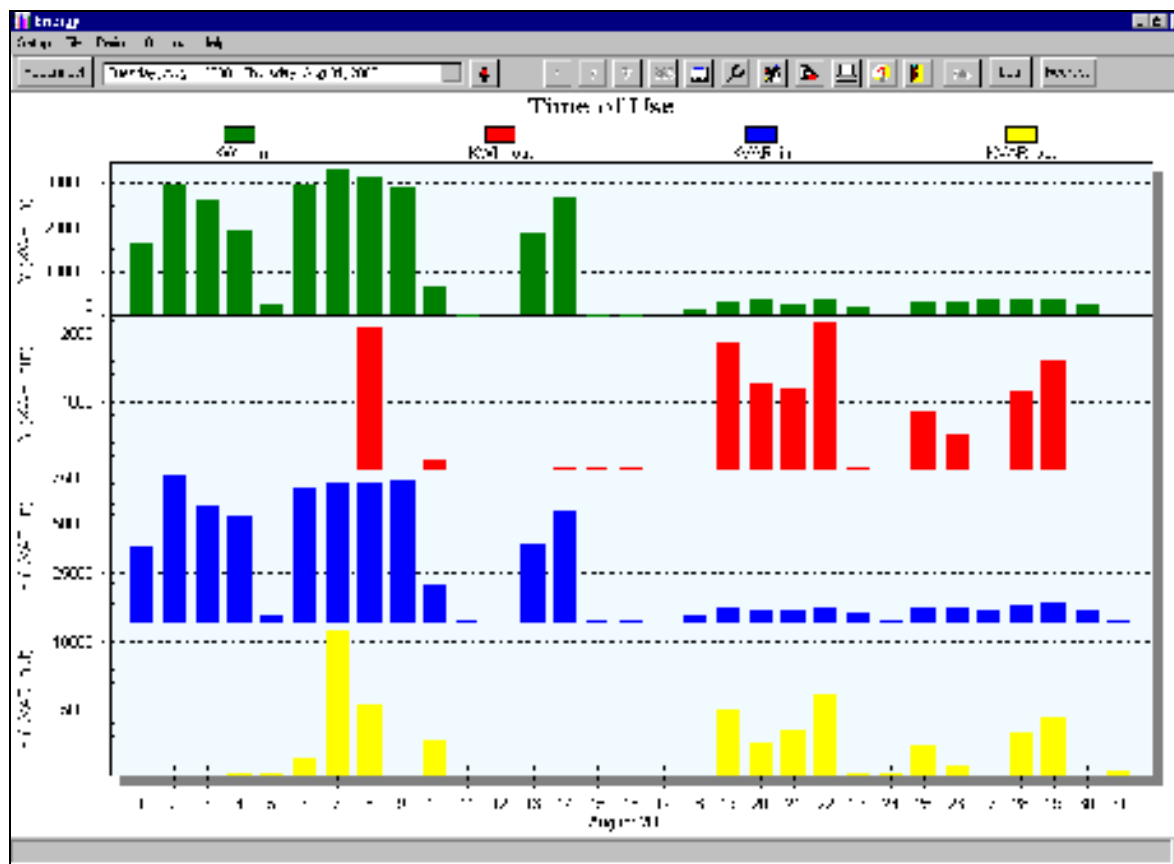
Trafo #3: Min/Max since today at 13:30:30

		L1/L12	L2/23	L3/L31	Σ/Avg.
V Ph	V	220.6	221.1	219.7	220.5
V Line	V	382.5	382.0	380.6	381.7
I	A	325.2	323.5	288.1	312.3
P	kW	69.6	69.9	62.9	202.4
Q	kVAr	15.8	7.4	1.5	24.7
S	kVA	71.7	71.5	63.3	206.5
P.F.		0.98L	0.99L	1.00L	0.99L
Freq.	Hz	50.0	50.0	50.0	50.0
THD Vph	%	1.3	1.5	1.5	1.4
THD Vln	%	1.1	1.0	1.0	1.0
THD Cur	%	8.9	19.6	14.7	14.4

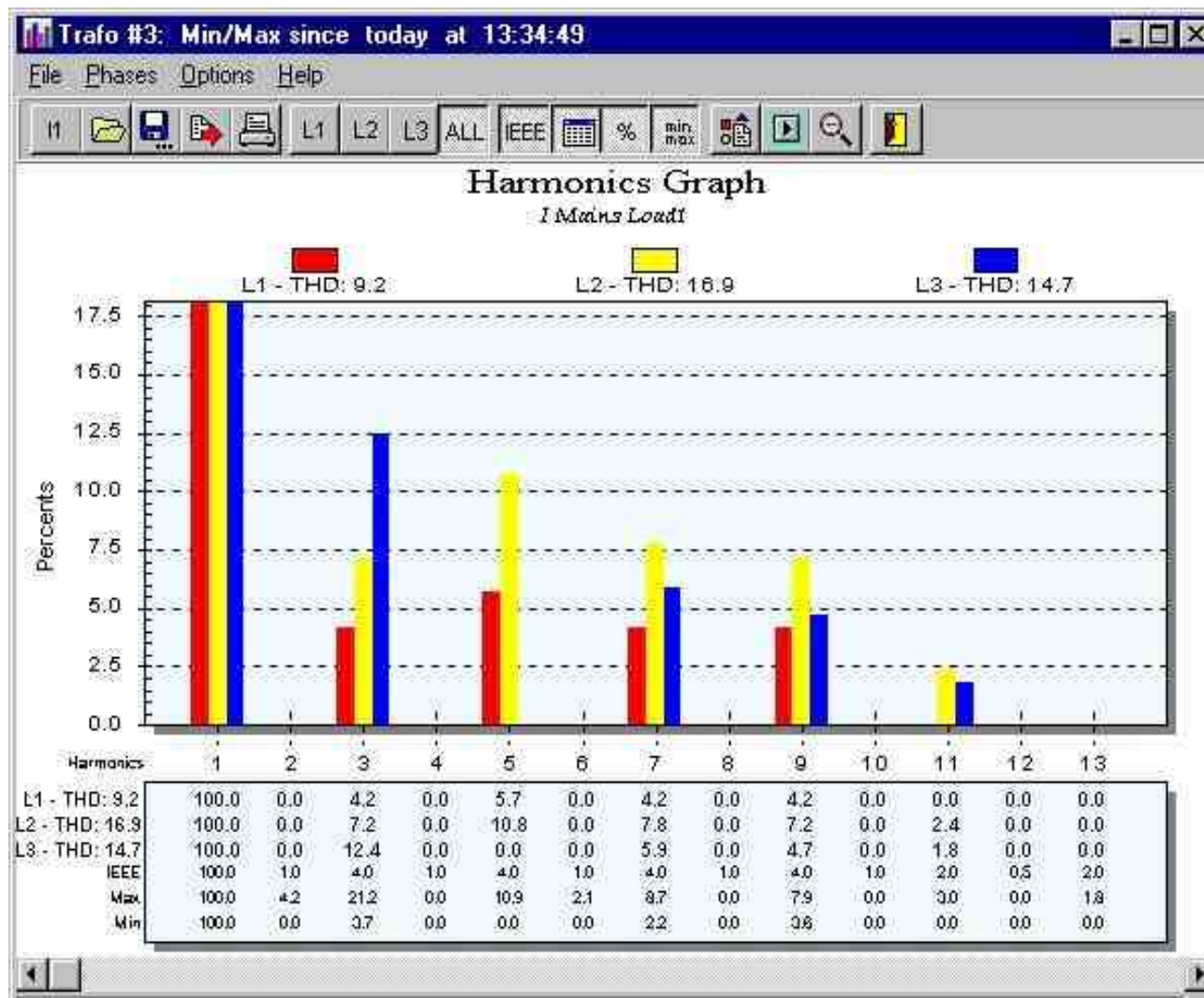
Normal Reset Load1 Pause Exit



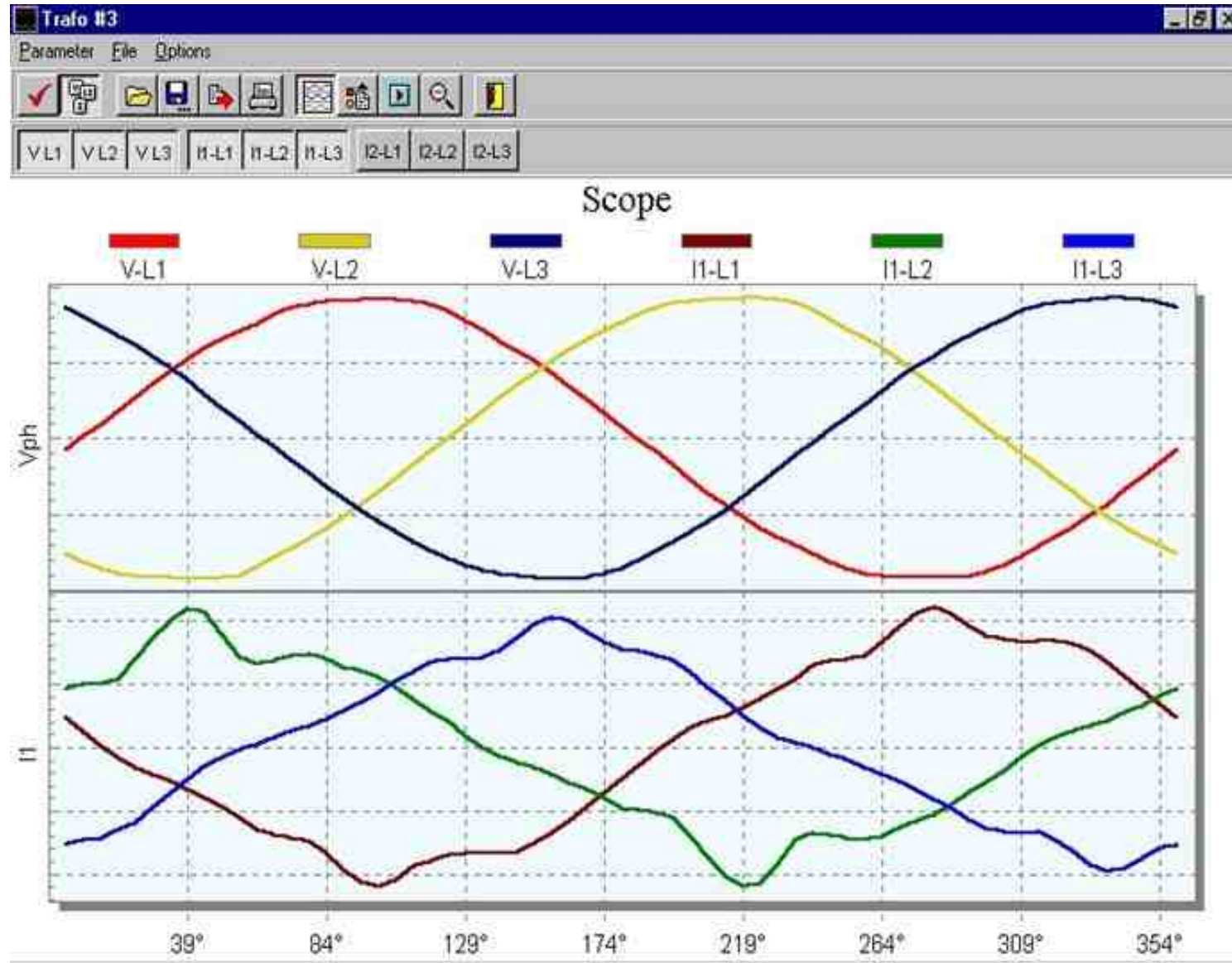
Power IQ Messung Betriebszeit



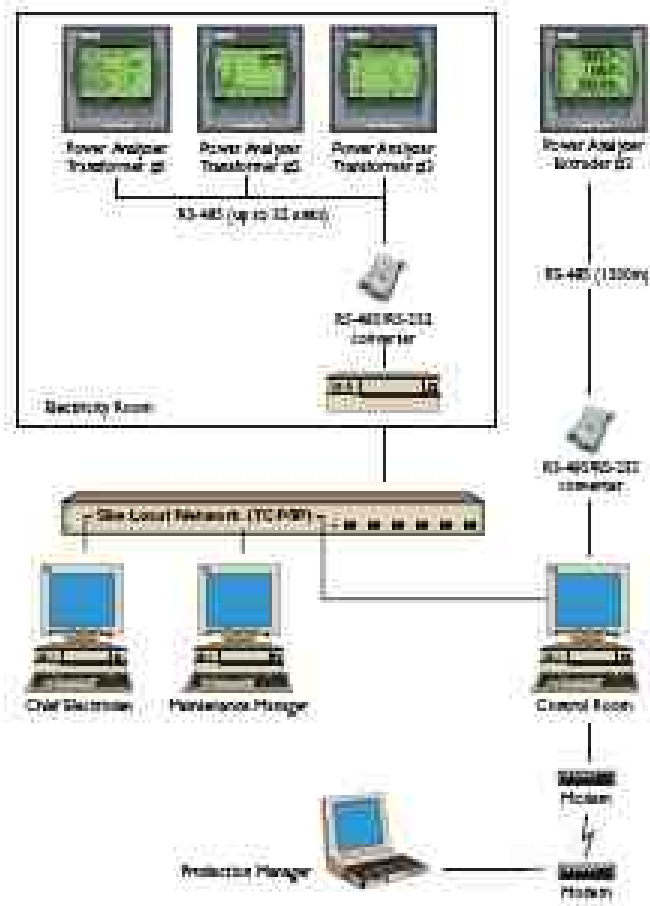
Power IQ Messung Oberwellen



Power IQ Oszilloskop



PowerIQ PC - Kommunikation



- | Fernsteuerung und Fernmessung.
- | Schnelle Kommunikation - Neue Daten in jeder Periode
- | Große Entfernung zwischen PC und Meßgerät.
- | Datenübertragung im Intranet oder Internet