EMIN Vietnam joint stock company is the leading company in direct importing and distributing Testing equipments, Automation equipments, Laboratory equipments, Handheld Tools..... With variety models, the best price come with flexible payment policy and good after-sell services. We do believe you will be served and be guidance with all the best.

Mission

Our mission is to work closely with the manufacturer, the leading provider in Vietnam and the world to provide high-quality equipment and the cheapest prices for customers as individuals and organizations domestic and foreign.

We are committed to becoming a reliable partner not only for enterprises with 100% foreign investment, multinational companies, local businesses, the Corporation, the Corporation, the projects with international funding, the joint-stock companies, limited liability companies, etc ... but also with businesses in the private sector, mainly small and medium enterprises.

Vision

The development objective of EMIN company will become a distributor of industrial equipment, instrumentation, automation, hand tools, ... leading in Vietnam in order to meet most of the needs of the enterprises in Vietnam’s economy.

The following business perspective were employees of JSC EMIN Vietnam understood, and imbued with absolute compliance with:

- No selling substandard, counterfeit and pirated goods, goods of unknown origin ...

- Always provide our customers the best products with the most competitive price comes with a perfect service.

- Always place the top prestige, not for profit, but fraudulent, deceptive customers ...

- Always put yourself in the place of the customer to take the decision, most likely to behave ...

- Always satisfy every customer to EMIN.
- Provide a comprehensive electrical measurement in civil and industrial.
- Power Laboratory Equipment
- Analyzing electronic signals Equipment
- Telecommunications test equipment
- Fitting equipment, electronics repair
# I - Electrical Measuring Instrument

## Clamp Meter

<table>
<thead>
<tr>
<th>CHAUVIN ARNOUX</th>
<th>METRIX</th>
<th>FLIR</th>
<th>SANWA</th>
<th>GW INSTEK</th>
<th>PROTEK</th>
<th>EXTECH</th>
<th>HIoki</th>
<th>KYORITSU</th>
<th>TENMARS</th>
<th>SEW</th>
<th>SONEL</th>
<th>BKPRECISION</th>
<th>TESTO</th>
<th>LUTRON</th>
<th>PROKITS</th>
<th>WUHAN</th>
<th>KEYSIGHT</th>
<th>WUHAN</th>
</tr>
</thead>
</table>

**Model: CL601**
- Range: 0 to 600 AAC RMS
- Resolution: 0.1 A
- Sampling rate: 64 samples/period
- Storage interval: programmable from 125 ms to 1 day
- Recording modes: Start/End, FIFO, XRM extended mode, on alarm
- Recording duration: from 15 minutes to 8 weeks, programmable with DATA-VIEW
- Storage capacity: 240,000 measurements (512 kB)
- Communication: optically-isolated USB 2.0
- Power supply/battery life: 2 x AA 1.5V batteries / from 100 hrs to more than 45 days

## Multimeter

<table>
<thead>
<tr>
<th>SANWA</th>
<th>CHAUVIN ARNOUX</th>
<th>METRIX</th>
<th>FLIR</th>
<th>TEKTRONIX</th>
<th>KEITHLEY</th>
<th>GW INSTEK</th>
<th>HIoki</th>
<th>KYORITSU</th>
<th>SEW</th>
<th>EXTECH</th>
<th>SONEL</th>
<th>PROTEK</th>
<th>TENMARS</th>
<th>EZ DIGITAL</th>
<th>TESTO</th>
<th>OWON</th>
<th>LUTRON</th>
<th>UNI</th>
<th>BK PRECISION</th>
<th>PROKITS</th>
<th>TTI</th>
<th>GLOBAL</th>
<th>KEYSIGHT</th>
</tr>
</thead>
</table>

**Model: YX360TRF**
- Indicator needle
- DCV: 0.1/0.25/2.5/10/50/250/1000V + -5%
- ACV: 10/50/250/750V + -4%
- Ω: 2k/20k/200k/2M/200MΩ + -5%
- DCA: 50u/2.5m/25m/0.25A
- C: 10uF
- Source: R6 (IEC) or UM-3 (1.5V) x2

## Cable Tester/Meter

<table>
<thead>
<tr>
<th>SEW</th>
<th>CHAUVIN ARNOUX</th>
<th>EXTECH</th>
<th>SONEL</th>
<th>MEGGER</th>
</tr>
</thead>
</table>

**Model: 5500CB**
- Output signal frequency: 125kHz
- Voltage measurement range: 12~300V AC/DC
- Accuracy: ±(2%rdg+2dgt)
- Display: LCD shows function and bargraph
- Fuse: 690V/0.5A (6.3 x 32mm)
### Leakage Current Tester

**Model: 2412**
- **Measurements:**
  - Current AC: 20 mA, 200mA, 2A, 20A, 200A, 500A
  - Voltage AC: 0 ~ 600V
  - Resistance: 200Ω
  - Frequency: 40 ~ 400Hz
  - Ring pliers: Ø40mm

### Power Quality Analyzer

**Model: C.A 8333**
- **Specifications:**
  - Number of channels: 3U / 4I
  - Number of inputs: 4V / 3I
  - IEC 61000-4-30: EN50160 reports
  - Voltage (TRMS AC+DC): 2 V to 1,000 V
  - Voltage ratio: Up to 500 kV
  - Current (TRMS AC+DC):
  - MN clamps: MN93 : 500 mA to 200 AAC ; MN93A : 0.005 AAC to 100 AAC
  - C193 clamp: 1 A to 1000 AAC
  - AmpFlex® or MA clamps: 100 mA to 10000 AAC

### Low Voltage Tester

**Model: LVD15**
- **Specifications:**
  - Voltage detection: 50V~1000V AC
  - Frequency: 50~500 Hz
  - Dimensions: 142(L) x 28(W) x 27(D)mm
  - Weight (battery included): Approx. 45g
  - Power source: 1.5V (AAA) x 2

### Phase Indicator, Detector

**Model: 8030**
- **Functions:**
  - Directive
  - Voltage AC 200 ~ 480V
  - Frequency: 20 ~ 400Hz, 200V ~ 480V

---

*Testing & Measuring Everything*
# I - Electrical Measuring Instrument

## Tachometer

<table>
<thead>
<tr>
<th>Model: 461895</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Range (RPM)</strong></td>
</tr>
<tr>
<td>Contact 5 to 99,999</td>
</tr>
<tr>
<td>Non-contact 0.5 to 20,000</td>
</tr>
<tr>
<td><strong>Accuracy</strong> 0.05% rdg +1 digit</td>
</tr>
<tr>
<td><strong>Surface Speed</strong> 0.2 to 6560 ft/min</td>
</tr>
<tr>
<td>0.05 to 1999.9 m/min</td>
</tr>
<tr>
<td>Resolution 0.1 rpm (&lt; 1,000 rpm)</td>
</tr>
</tbody>
</table>

## Earth Resistance & Resistivity Tester

<table>
<thead>
<tr>
<th>Model: 4105A</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Resistance: 0 ~ 20Ω / 0 ~ 200Ω / 0 ~ 2000Ω</td>
</tr>
<tr>
<td>+ Ground Voltage (50.60 Hz): 0 ~ 200V AC</td>
</tr>
<tr>
<td><strong>Accuracy</strong> + Resistance: ±2% rdg ±0.1Ω (20Ω range)</td>
</tr>
<tr>
<td>±2% rdg ±3dgt (200Ω/2000Ω range)</td>
</tr>
<tr>
<td>+ Ground voltage ±1% rdg ±:: 4dgt</td>
</tr>
<tr>
<td><strong>Source</strong>: R6P (AA) (1.5V) x 6</td>
</tr>
<tr>
<td><strong>Size</strong>: 105 (L) x 158 (W) x 70 (D) mm</td>
</tr>
</tbody>
</table>

## Multifunction Electrical Installations Meter

<table>
<thead>
<tr>
<th>Model: 6016</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Directive</td>
</tr>
<tr>
<td>+ Measuring communication circuit, measuring circuit, measuring soil resistivity ...</td>
</tr>
</tbody>
</table>

## Magnetic Field Meter

<table>
<thead>
<tr>
<th>Model: NF-5030</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency range</strong>: 1Hz to 1MHz (20/30MHz with Option 008/010)</td>
</tr>
<tr>
<td>Magnetic field (Tesla): 1pT to 500μT (typ. at 50Hz) expandable up to an amount of Tesla with PBS1</td>
</tr>
<tr>
<td>Magnetic field (Gauss): 10nG to 5G (typ. at 50Hz)</td>
</tr>
<tr>
<td>Electric field: 0.1V/m to 5kV/m (typ. at 50Hz)</td>
</tr>
</tbody>
</table>

## Static Meter

<table>
<thead>
<tr>
<th>Model: 523-1-CE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement Range</strong> 0 to ± 20 kV DC.</td>
</tr>
<tr>
<td><strong>Range</strong> 0 to ± 19,99 K V.</td>
</tr>
<tr>
<td><strong>Resolution</strong> 10 V.</td>
</tr>
<tr>
<td><strong>Dimensions</strong> 31 mm H x 59 mm W x 183 mm D</td>
</tr>
</tbody>
</table>

---

Testing & Measuring Everything
### Static Meter

**Model: 152-1-CE**  
Measurement Range: 103 to 1013 Ω  
Measurement Accuracy (of reading) at 25°C  
± 10°C and 20% to 70% RH:  
Point to Point Probe (152BP-5P):  
103Ω to 1012Ω range, ± 5%,  
1013Ω range, ± 8%

![Static Meter Image](image1)

### Electrostatic Discharge/Charger Monitors

**Model: NK-7001**  
Detection method: Vibration-type static sensor  
- Attenuation property  
+ Time taken for reduction from 1,000V to 100V  
+ Time taken for reduction from 200V to 20V  
Display range: ± 0.1 - ± 1999.9V ; 0.01 - 99.99sec

![Electrostatic Discharge Image](image2)

### Electrostatic Chuck Supply

**Model: PM12003**  
Output Voltage Range: 0 to +1kV peak AC, adjustable.  
Max Source Current: Rise Time: Less than 5A peak AC, 5mA DC  
Rise Time (10 to 90%, 10pF load): Less than 10ns  
Fall Time (10 to 90%, 10pF load): Less than 100μs

![Electrostatic Chuck Supply Image](image3)

### Static Eliminator (Ionizer)

**Model: 950**  
Output Voltage: 3.0 kV AC  
Air Purge - operating pressure: 0.05 to 0.6MPa  
Gauge Pressure (when connecting Nozzle Ionizer and optional nozzle)

![Static Eliminator Image](image4)

### Cable Fault Location

**Model: MPL-FF**  
Output frequencies:  
512Hz/9.5kHz/38kHz/80kHz  
Output power: 1W–5W  
Transmitting modes: Direct connection, inductive, External coil  
Battery Type: LR20 x 8, Direct: 50h  
Visual indication: LCD with Backlight

![Cable Fault Location Image](image5)
# I - ELECTRICAL MEASURING INSTRUMENT

## High Voltage Amplifier

Model: **HA-205**
- 2500V/μS Super High Speed Model
- 170Vp-p (±85V DC)
- 900mA/p-p (±450mA DC)
- Bandwidth: 3MHz / 100Vp-p
- Gain (AMPL): 0~35 (10 Turn VR+SW)
- Microprocess Control Protection

![High Voltage Amplifier](image)

**PINTEK**

## Insulation Tester

**Model: 3128**
1. Measurement of insulation resistance
2. Test voltage:
   - 500V/1000V/2500V/5000V-
   - 10000V/12000V
3. Resolution resistance measurement:
   - 500GΩ/1TΩ/2.5TΩ/35TΩ
4. Accuracy: ±5% rdg | ± and ±20% rdg
5. 3digit depending on resolution
6. Short circuit current: 5mA
7. 2) the output voltage
8. Power voltage:
   - 500V/1000V/2500V/5000V-
   - 10000V/12000V
9. Accuracy: 0~±20%
10. Solutions chosen:
    - 50~600V (step 5V),
    - 610~1200V (10V step),

![Insulation Tester](image)

**KYORITSU**
- CHAUVIN ARNOUX
- METRIX
- FLIR
- SANWA
- SEW
- SONEL
- LUTRON
- HIoki
- EXTECH
- MEGGER
- SMARTSENSOR
- TENMARS
- BK PRECISION
- KEP
- AINUO
- DET
- TSURUGA
- IET LAB

## High Voltage Testers

Model: **275HP**
- 8 voltage settings: 240Vac, 2kV, 6kV, 11kV, 22kV, 33kV, 132kV, and 275kV.
- High bright LED visual indication.
- Sound indication.
- Easy-to-prove method.
- Self-test selection.
- Use 3 x 1.5V "C" batteries.
- High impact nylon casing.
- Non-contact work by proximity.

![High Voltage Testers](image)

**SEW**
- **PINTEK**
- **WUHAN**

## Thermal Imaging Camera

Model: **FLIR E8**
- R resolution: 320 x 240 pixels
- MSX resolution: 320 x 240 pixels
- Thermal sensitivity: 0.06°C
- Spatial resolution (IFOV): 2.6 mrad
- Field of view/min focus distance:
  - 45° x 34° / 0.5 m

![Thermal Imaging Camera](image)

**FLIR**
- CHAUVIN ARNOUX
- SONEL
- SEEK
- WUHAN
- TESTO
### Electrical Measuring Instruments

#### Cable Height Meter

**Model: L5**
- Temperature: -20° to +45° C / -4°F-113°F.
- Height: 0-999 m/ft. Resolution height: 0.1 m/ft.
- Angle: -55° - 85°. Unit: Degrees 360°, Grads 400° and %. Resolution: 0.1°.
- Accuracy: 0.1°.
- Laser: Distance: 46cm/1.5ft - 700m/2000ft.

#### Infrared Thermometer

**Model: VIR50**
- Laser Convergence Distance: 50” (127cm)
- IR Temperature Range: -58 to 3992°F (-50 to 2200°C)
- Repeatability: ±0.5% or 1.8°F/1°C
- Basic Accuracy: ±(1% of rdg + 4°F/2°C) (31 to 212°F)
- Max resolution: 0.1°F/°C
- Emissivity: 0.10 to 1.00 Adjustable
- Field of View (Distance to Target): 50:1
- Type K Temperature Range: -58 to 2498°F (-50 to 1370°C)
- Air Temperature Range: 32 to 122°F (0 to 50°C)
- EBRO SONEL HUATEC FLIR SMART SENSOR BK PRECISION PRO KITS LaserLiner CHAUVIN ARNOUX

#### Battery Tester

**Model: BT100**
- Built-in datalogger stores up to 999 tests
- Simultaneously measures DC Voltage and AC Milliohms
- Auto power off
- Includes Windows® 95/98/NT/2000/ME/XP compatible software for downloading readings to a PC

#### Electrical Safety

**Model: HS-175-8**
- Extended length (m): 10.62
- Retracted length (m): 1.73
- Stick width (mm): 57.5

#### Safety Testers

**Model: GPT-9603**
- 5 kV AC, 20 mA, 100 VA AC
- 6 kV DC, 6 mA
- Insulation Resistance
- 240 x 48 Ice Blue Dot Matrix LCD
- Auto W-I and I-W Mode
### 1.2. Electrical Tester

#### Relay Protection Test Device

| Model: HT-802  | WUHAN  
|--------------|----------------|
| AC current source | HV HIPOT  
| - Phase current output (RMS): 0 ~ 40A/phase; accuracy: 0.5%  | DET  
| - 3-phase in parallel output (RMS): 0 ~ 120A |

#### Current Generators

| Model: MS15000B | FRANCELOG  
|-----------------|----------------|
| - Electrotechnic current generator 15000VA  | KEP  
| + Continuously adjustable using auto-tranformer.  | DET  
| + Current: 0 to 3000A /5 s/ 5V / cables 20m - 1 x 185mm²  | WUHAN  

#### Circuit Breaker Tester

| Model: PKV-U3.0 | SKB  
|----------------|----------------|
| Finish all testing subject by itself, no need to connect auxiliary equipment. Built-in printer, to print results easily. Large screen LCD, graphically display.  | HV HIPOT  
| WUHAN |

#### Transformer Test Equipment

| Model: PKR-2 | SKB  
|--------------|----------------|
| Instrument and accompanying documents: inbuilt OLTC in-place diagnostics mode (DRM-test), calibration certificate, operation manual, record book, measurement procedure, software (SW) for PC.  | CHAUVIN ARNOUX  
| DET  | WUHAN  

#### Insulation Testing

| Model: SVS-15D | DET  
|----------------|----------------|
| Output test AC voltage ranges: 0.1; 3; 15 (kV)  | KEP  
| High voltage sources count: 1  | WUHAN  
| Leakage current measuring range: 0.3-7.6; 0.3-10 (mA)  |  
| Total weight (control unit, testing bath, HV unit): 51kg |
### Withstand Voltage Test

**Model:** YDQ-300/300  
- Impedance voltage: ≤8%  
- No-load current: < 7%  
- Product type: AC, AC&DC, AC cascade, AC DC cascade.  
- Capacity (kVA): 300  
- HV (kV): 300

**WUHAN**

### Oil Test Equipment

**Model:** OLT-100A  
Compact and lightweight  
Fully automatic operation  
Fully compatible with IEC 60156  
Preloaded testing programs for different standards  
Built-in printer

**KEP**  
**DET**  
**WUHAN**

### Arrester Testing Device

**Model:** HTFC-2GB  
- Voltage (U mA):  
  Range: (0~1999)V; Maximum error: ±1%±1d; Test Conditions: 1mA±5μA  
- Leakage current (I): 0.75U 1mA:  
  Range: (0.1~199.9) μA; Maximum error: ±(2 μA ±1d); Test Conditions: 0.75 U1mA, ±2%±1d

**WUHAN**

### Capacitance & Tan δ Meter

**Model:** HTRG-H  
- Capacitance measurement range: 0.1μF ~ 3300μF  
- Accuracy: ±(reading x 1% + 0.005μF)  
- Resolution: 0.001μF  
- Inductance measurement range: 100μH ~ 50H  
- Accuracy: ±reading x 2%

**WUHAN**  
**KEP**  
**RAYTECH**

### High Voltage Testing

**Model:** AID-70/50  
Output voltage type: DC, AC  
Max output voltage (kV): 70VDC, 50VAC  
Max output current (mA): 14(DC), 45(AC)  
Output voltage measuring range (kV): 0.5-70 (VDC), 0.5-50 (VAC)

**DET**  
**KEP**  
**SONEL**  
**WUHAN**

### High-Voltage Measuring

**Model:** RD-250  
RD-250 provides a measurement of:  
- RMS value of the AC voltage of 50 Hz.  
- DC average value.  
RD-250 can be used to test high-voltage laboratories of electrical and energy profile, as well as scientific research, institutions.
### High-Voltage Step-Up Transformers

**Model:** TIOG-100 (17kVA)
Transformers test single-phase gas-filled TIOG-55 and TIOG-100 are intended for testing of the high-voltage electrotechnical equipment of class of voltage of 10 kV and 35 kV (above) to short-term variables (50 Hz) up to 55 kV and 100

### Tan Delta Meter

**Model:** IPI-10
IPI-10 is designed to measure the dielectric loss tangent tan δ and the capacity of high voltage insulation C when maintaining, repairing, setting-up, testing various power facilities both

### Phase Meter

**Model:** FPM03
Measure:  
- Frequency of the 3 voltages  
+Display of the 3 frequencies (FU1, FU2 and FU3).

### SF6 Gas Analyzer

**Model:** HTZH-2H
- Measuring range: 0% ~ 100%
- Accuracy: ±0.5%
- Measuring time: < 2min
- Dew point
- Measuring range: -80°C ~ +20°C
- Accuracy: ±0.5°C (-80°C ~ 60°C)

### 1.3. Calibrators

#### Process Calibrator

**Model:** MC142
Voltage range: 1mV to 200V  
Current range: 100uA to 2A  
Wave form: square positive, negative, symmetrical, saw A, B, triangle limited sin  
Peak value accuracy: 0.3% + 50µV  
Displayed values: peak, calculated rms

### Dry Block, Baths Calibrators

**Model:** TCS 1200
Range: from 150°C (300°F) to 1200°C (2190°F)  
Absolute Stability: ±0.2°C @ 1100°C  
Radial Uniformity: ±0.2°C @ 1100°C  
Heating Speed: 100°C to 1100°C in 20 minutes  
Cooling Speed: 1100°C to 800°C in 50 minutes  
Stabilization Time: 15 minutes
### Precision Pressure Test Gauge

**Model: DPC100-20(0.02,SG)**
- **Accuracy:** 0.02%, SG
- **Pressure range:** (0–600) bar
- **Engineering unit selectable:** Pa, kPa, MPa, psi, bar, mbar, mmH2O, mmHg
- **Display:** 6-digit resolution Back lighted display

**KDS HUAXIN**

---

### Process Calibrator

**CHAUVIN ARNOUX PRESYS HIOKI KEYSIGHT SEW EXTECH FLUKE HUAXIN IET LAB KDS**

**Model: C.A 1623**
- **Range:** 0.00 Ω - 400.00 Ω; 400.0 Ω - 1,500.0 Ω; 1,500.0 Ω - 3,200.0 Ω
- **Accuracy 4-wire input/ 2-wire/3-wire input/ Output:** ±0.1 Ω; ±0.5Ω; ±1Ω/ ±2Ω
- **Acceptable excitation in:** 0.1 - 0.5 mA/ 0.5mA - 3.0mA ; 0.05mA - 0.8mA; 0.05mA - 0.8mA
- **P110 365**

---

### Portable Pressure Calibrator

**CHAUVIN ARNOUX PRESYS HIOKI KEYSIGHT SEW EXTECH FLUKE HUAXIN IET LAB KDS**

**Model: PCS-5070**
- **Accuracy:** 0.025 % of full scale.
- **Input range**
  - Volt: -10 to 11V and 11 to 45V
  - Resolution: 0.0001V
  - Accuracy: ±0.02% FS
  - mA: ±5 töl 24.5 mA

---

### Comparison Test Pumps

**HUAXIN KDS**

**Model: HS318**
- **Pressure Range:** (0–600) bar
- **Stability:** Above 0.05%FS
- **Working Media:** Transformer oil

---

### Sound Calibrator

**EXTECH PULSAR TENMARS BK PRECISION ACO TESTO LUTRON**

**Model: 407766**
- **Frequency:** 1000 Hz / ± 5%
- **Sound Pressure Level:** 114dB / ± 1dB
- **Distortion:** < 2% Total Harmonic Distortion (THD)
- **Operating Temperature:** 32 to 122°F (0 to 50°C)
### Calibration Resistors

<table>
<thead>
<tr>
<th>SEW</th>
<th>SONEL</th>
<th>AINUO</th>
<th>IET LAB</th>
</tr>
</thead>
</table>

**Model: RCB-3-1T(1T)**
- Resistance ranges (Ω): 1M, 10M, 100M, 1G, 5G, 10G, 100G, 500G
- Resistance tolerances: ±1%(F)
- Tolerance:
  - ±25ppm/°C: 1MΩ, 2MΩ, 7MΩ, 10MΩ, 20MΩ, 30MΩ, 50MΩ, 100MΩ, 200MΩ, 500MΩ

### Mechanical Calibration Equipment

<table>
<thead>
<tr>
<th>METROLOGY</th>
</tr>
</thead>
</table>

**Model: CTB-91000**
- Center Distance: 1000mm
- Center Height: 170mm
- Accuracy: 0.008mm

### Flow Calibration

<table>
<thead>
<tr>
<th>BUCK</th>
<th>FLUKE</th>
</tr>
</thead>
</table>

**Model: M-30**
- Dimensions: 5.5L x 6W x 2.5D inches 14L x 15.3W x 6.4D cm
- Flow range: 0.100 - 30 LPM

### 1.4. Electronic measuring devices

#### IC Programmer, Tester

<table>
<thead>
<tr>
<th>GW INSTEK</th>
<th>BK PRECISION</th>
<th>LEAPTRONIX</th>
</tr>
</thead>
</table>

**Model: SU-3280**
- Logic Signal Level: 1.5V ~ 6.0V, 10mV
- IOL/IOH Current: 10mA
- Logic Signal Frequency: 75MHz (3-5V) / 60MHz (2.5V) / 45MHz (1.8V) / 25MHz (1.5V)

#### LCR Meter

<table>
<thead>
<tr>
<th>GW INSTEK</th>
<th>PROTEK</th>
<th>SANWA</th>
<th>EXTECH</th>
<th>PINEK</th>
<th>HIOKI</th>
<th>TENMARS</th>
<th>BK PRECISION</th>
<th>GLOBAL</th>
<th>KEYSIGHT</th>
<th>MICROTEST</th>
<th>CHROMA</th>
<th>PROKITS</th>
<th>TTI</th>
<th>IET LAB</th>
</tr>
</thead>
</table>

**Model: LCR-8110G**
- Wide Test Frequency 20Hz ~ 10/5/1MHz
- 0.1% Basic Accuracy & 6 Digits Measurement Resolution
- Large LCD Display with Intuitive Interface
- Full Measuring Functions with DUT V/I Monitor
- PASS/FAIL Function (abs, % or delta) with Judgment Alarm
Frequency Counter

**Model: FC-7150U**
Frequency measuring range:
- 0.1Hz–100MHz in A, B input
- 80MHz–1.5GHz in C input (7150U only)
Trigger level adjustment for input A

Analog Oscilloscope

**Model: OS-5100**
100MHz 2CH dual trace
6 inch large size high luminance CRT
Wider than specified frequency response
Signal delay with delay line useful for observation

Digital Oscilloscope

**Model: TBS1052B-EDU**
Analog channels: 2
Bandwidth: 50MHz
Sample rate: 1 GS/s
Record length: 2.5k
Bandwidth limited: 20 MHz
Input coupling: AC, DC, GND
Input impedance: 1 MΩ ±1%, 50 Ω ±1%
Input sensitivity range: 1 MΩ

Handheld Oscilloscope

**Model: 2516**
Bandwidth: 100 MHz
Real Time Sampling Rate: 1 GSa/s
(half-channel interleaved), 500 MSa/s
(per channel)
Channels: 2 isolated
Max Memory Depth: 40 kpts
Vertical Resolution: 8 bit

Logic Analyzers

**Model: LA-2050**
Timing Analysis: 500MHz
State Analysis: 200MHz
Bandwidth: 200MHz
Function/Arbitrary Waveform Generators

<table>
<thead>
<tr>
<th>Model: 4034</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANNELS: 2</td>
</tr>
<tr>
<td>Frequency: 0.1 Hz to 50 MHz</td>
</tr>
<tr>
<td>Period: 20 ns to 10 s</td>
</tr>
<tr>
<td>Width: 10 ns to (Period - 10 ns)</td>
</tr>
<tr>
<td>Delay: 0 ns to (Period - Width - 10 ns)</td>
</tr>
<tr>
<td>Duty Cycle: 1 to 99%</td>
</tr>
<tr>
<td>Output amplitude: -10 V to +10 V into 50 Ω load</td>
</tr>
<tr>
<td>Operating mode: Continuous, Triggered, Gated, Burst, External Width</td>
</tr>
<tr>
<td>Pulse function: Single, Double</td>
</tr>
<tr>
<td>Trigger input: Sensitivity 200 mVpp minimum</td>
</tr>
</tbody>
</table>

1.5. Telecom - TV Tester

RF Voltmeter

<table>
<thead>
<tr>
<th>Model: 9241</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Channel 1% accuracy at full scale</td>
</tr>
<tr>
<td>Voltage Range: 200 μV to 10 V in eight ranges, (300 V to 700 MHz with a 100:1 divider). Indication to 50 μV</td>
</tr>
</tbody>
</table>

Radio Stations Tester

<table>
<thead>
<tr>
<th>Model: RST-430</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band 1.6... 470 MHz</td>
</tr>
<tr>
<td>Carrier setting error &lt; 10^-6</td>
</tr>
<tr>
<td>Deviation in FM mode 0.1 ... 20 kHz (step 10 Hz)</td>
</tr>
<tr>
<td>Deviation setting error &lt; 10%</td>
</tr>
</tbody>
</table>

RF, Microwave Power Meter

<table>
<thead>
<tr>
<th>Model: 4500B</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.4” TFT color LCD display</td>
</tr>
<tr>
<td>Displays up to 4 measurement channels, 2 memory channels and 1 math channel simultaneously</td>
</tr>
</tbody>
</table>
# Measuring Low-Frequency Signals

| Model: SVG-5          | Frequency range 300 Hz ... 2.5 MHz  
|                      | Step 1 Hz, 10 Hz, 100 Hz, 1 kHz, 10 kHz  
|                      | Relative frequency instability ±1 • 10-5 %  
|                      | Frequency setting error ± 4 • 10-5 % ±1Hz  

## Audio Analyzer

| Model: 2015          | THD, THD+Noise, and SINAD measurements  
|                      | 5 standard audio shaping filters  
|                      | 20Hz-20kHz sine wave generator  
|                      | 13 Digital Multimeter functions (6-1/2 digits)  

## Base Station Analyzers

| Model: MT8220T       | 2-port Cable and Antenna Analyzer  
|                      | 400 MHz to 6 GHz  
|                      | Spectrum Analyzer 150 kHz to 7.1 GHz  
|                      | Power Meter 10 MHz to 7.1 GHz  

## PIM Tester

| Model: PIM21         | Range: -80 to -153 dBC @ 850 MHz (typical -155 dBC)  
|                      | Accuracy: ± 2 dB to -153 dBC @ 850 MHz  
|                      | ± 3 dB to -155 dBC @ 850 MHz  
|                      | Pim Test: Single port reflection measurement  
|                      | Test Frequencies: 2 custom frequencies*  

## Signal Analyzers

| Model: A434L         | VSWR, DTF, Cable Loss, Power Meter Functions  
|                      | Frequency Range: 5MHz ~ 4GHz  

## Cable Telecom Test

| Model: LC-90         | LCD display.  
|                      | Test pin configuration for 10/100 base-T cable, 10 base-2 cable, RJ45/RJ11 modular cables, AT and T 258 A cable, EIA/TIA 568A/568B cables and Token Ring Cables etc.  

---

Testing & Measuring Everything
1.6. Fitting And Repair Electronics Equipment

**DC Power Supply Adjustable ≤ 1KW**

- **Model: ODP3031**
  - Max output resolution: 1mV / 1mA
  - Low ripples / low noise: 300 ≤Vrms / 2 mVpp
  - Up to 100 group timers
  - Up to 10 group preset system configurations
  - Over-voltage / Over-current protection
  - Auto-cooling system
  - 3.9 inch high resolution
  - (480 x 320 pixels) TFT LCD display
  - Multiple communication interface: USB, and RS232

**AC Power Supply**

- **Model: 5200A**
  - AC Voltage Measurement:
    - Range: 300Vrms
  - Accuracy: ± 0.3% of rdg, ± 0.2% of f.s.
  - Resolution: 0.1Vrms
  - AC Current Measurement:
    - Range / Resolution: 0.2A/0.1mA, 2A/0.1mA, 20A/10mA

**DC Electronics Load**

- **Model: 3311F**
  - Max Power: 300W
  - Current Max: 60A
  - Operating voltage: 60V
  - Display: V, A, W
## Soldering Stations

**Model: WSD811**
- Soldering station, 1 channel, 80 W / 230 V
- Silver-Line Technology
- 1 channel with soldering iron WSP 80 incl. soldering tip LF-B and safety rest WDH 10
- Dimensions W x D x H (mm): 170 x 118 x 102
- Channels: 1
- Voltage: 230 V
- Heating output: 95 W

## Conductive Rework Systems

**Model: PRC2000**
- Unit: PRC 2000 PRC 2000E
- Power Requirements: 115VAC, 60Hz, 230VAC, 50/60Hz. 400 Watts maximum
- 365 Watts maximum

## Pre-Heaters

**Model: MC-301**
- Effective Soldering Area: 9.84” x 7.87” (250 x 200 mm)
- Heating Chamber Size: 13.78" x 9.84” (350 x 250 mm)
- Temperature Range: Ambient - 310 °C

## Area Array (BGA) Rework

**Model: IR 3000**
- Heater (top side): Medium/Long Wave IR, 500W
- Bottom Heater with adjustable: working heightMedium/Long Wave IR, 1000W 220 x 155mm (8.6” x 8.6”)

## Fume Extraction Systems

**Model: ARM-EVAC 500**
- Part Number: 8889-0500-P1
- Power Requirements: 230 VAC, 50 Hz
- Noise Level: 61 dBA
- Number of Inlets: Three 75mm (3”)
- Mechanical Measuring Instruments
- Non-Destructive Testing
- Bearing tools
- Hydraulics, Lifting equipment
2.1. Mechanical Measuring Instruments

Digital outside micrometer

Model: 3109 - 25A
Take detailed measurements of external diameter, thickness of sheet metal
Design standard, compact, easy to use
Range: 0 - 25mm

Digital inside micrometer

Model: 3127 - 150
Range: 125-150mm
Resolution: 0.001mm/0.00005"
Accuracy: ± 5 μm
Protection level: IP 54

Digital Caliper

Model: 500 - 502 - 10
Range: 0 - 1000mm
Accuracy: ± 0.07mm
Resolution: 0.01mm

Digital depth Caliper

Model: 571 - 214 - 10
Range: 0 - 450mm
Graduation: 0.01mm
Accuracy: ± 0.002 in
Extension rods: 4 rods

Digital height gauge

Model: 1150 - 300
Range: 0 - 300mm / 0 - 12”
Resolution: 0.01mm / 0.0005”
Accuracy: ± 0.04mm

Protractor

Model: 187 - 907
Capacity gauge to measure the angle Mitutoyo machinery, molds, ... always the most accurate measurements
Can be used when measuring the height of fixed size
Length of leaf size: 150, 150 mm
# II - MECHANICAL AND INDUSTRIAL EQUIPMENT

## Bore Gages
- **INSIZE**
- **MITUTOYO**
- **MOORE & WRIGHT METROLOGY**

**Model: 2322 - 250A**
- Range: 160-250mm
- Graduation: 0.01mm
- Accuracy: ± 0.018mm
- Indicator

## Thickness Gages
- **PROCEQ**
- **DEFELSKO**
- **SAUTER**
- **INSIZE**
- **MITUTOYO**
- **EXTECH**
- **ELCOMETER**
- **HUATEC**
- **SMARTSENSOR**
- **NOVOTEST**
- **DAKOTA**

**Model: 7301**
- Range: 0 - 10mm
- Resolution: 0.01mm
- Accuracy: ± 15 μm

## Replica Tape Reader
- **PROCEQ**
- **DEFELSKO**
- **SAUTER**
- **HUATEC**
- **INSIZE**
- **MITUTOYO**
- **EXTECH**
- **ELCOMETER**
- **SMARTSENSOR**
- **NOVOTEST**
- **DAKOTA**

**Model: UTG C1**
- Measurement Range: 1.00 to 125.00 mm (0.040" to 5.000")
- Thru-Paint Capability: no
- Measurement Rate - Normal: 6 readings/sec
- Measurement Rate - Normal: 20 readings/sec
- Resolution: 0.01 mm (0.001")
- Accuracy: ±0.03 mm (±0.001")
- Monochrome display with transflective technology enhances sunlight readability

## Dial Indicators
- **INSIZE**
- **MITUTOYO**
- **HOREX**
- **MOORE & WRIGHT**

**Model: 513 - 415E**
- Range: 0-1mm
- Resolution: 0.01mm
- Accuracy: +/- 0.01mm

## Magnetic-Micrometer Stand
- **INSIZE**
- **MITUTOYO**
- **METROLOGY**
- **MOORE & WRIGHT**

**Model: 7011S - 10**
- Stem hole: ø4mm, ø8mm, ø9.53mm
- Size of magnetic stands (WxD): 50x58mm

---

**Page 20**

Testing & Measuring Everything
## II - MECHANICAL AND INDUSTRIAL EQUIPMENT

### Granite Surface Plate

- **Model:** 6900 - 1101
- **Size:** (LxWxH): 1000x1000x150mm
- **Weight:** 450 Kg
- **Accuracy:** 0.0048mm

### Gauge Block

- **Model:** 4100 - 122
- **Includes:** 122 blocks
- **Made of:** Alloy; Steel
- **Accuracy:** Grade 0 standard
- **Meets:** ISO3650
- **Supplied with:** Inspection certificate

### Steel Ruler

- **Model:** 7110 - 1000
- **Range:** 0-1000mm
- **Accuracy:** 0.20mm

### Distance Meters

- **Model:** D2 - DISTO
- **Contains:** A Class II Laser with 1mW output
- **Accuracy:** 1/16” up to 200-Feet Measuring Range; Quick and easy-measure distances at the touch of a button and calculate areas or volumes. Small and handy; fits into any pocket plus a 2 Year Warranty.
- **Certified:** Dust & SPLASH PROTECTED.

### Diameter Measurement Caliper

- **Model:** 11 - 100 - 1106
- **Range:** 0-1020mm
- **Material Scale:** Alloy coated aluminium, non-reflective

### Shims

- **Model:** 100 - 100CW
- **Model:** 100-100 CW
- **No:** B100070
- **Size:** 100X100X1.00mm
- **Size in:** 32 mm

---

*Testing & Measuring Everything* Page 21
## Laser Pulley, Shaft Alignment Systems

**Model:** BEGAD90  
Sheave diameters: B 60 mm (2.5”) and larger  
Sheave thickness: Not depending on sheave thickness

## Vibration - Acceleration - Balancing

### Brands:
- MMF  
- BEGA  
- ADASH  
- HUATEC  
- TOKYO-KEIKI  
- EXTECH  
- SMARTSENSOR  
- LUTRON  
- BRUEL & KJER  
- M&M PRO  
- ZBL  
- ACO  
- SPM

**Model:** HG6360  
Acceleration: 10Hz đến 1KHz, 10Hz to 10KHz: 0.1-200m/s  
Velocity: 10Hz to 1KHz: 0.1-400mm/s  
Displacement: 10Hz to 1KHz: 0.001-4.0mm  
Accuracy: <5%  
Auto power off  
RPM (revolution): 5-100000r/min  
Frequency: 0.1 to 10KHz

## Torque Meter

### Brands:
- INSIZE  
- SAUTER  
- LUTRON  
- MOUNTZ

**Model:** TQ - 8800  
Professionals with torque meter  
15 Kg-cm torque probe, whole  
3 kind display unit: Kg-cm, Kg-cm, cm LB-inch and Newton

## Gloss Meter, Roughness Meter

### Brands:
- DEFELSKO  
- INSIZE  
- HUATEC  
- MITUTOYO  
- ELCOMETER  
- HINOTEK

**Model:** SPG3 - E  
Hi Contrast reversible color LCD  
Measuring Range: 0 to 500 um (0 - 20 mils)  
Accuracy: (5 microns + 5%), (0.2 mils + 5%)  
Storage of 100,000 readings in up to 1,000 batches and sub-batches
**Force Gauges Meter**

- **Model: FH 100K**
  - Measuring range max: 100kN (10 ton)
  - Readout: 50 N
  - Precision: 0.5 % of (Max)
  - Measuring frequency: 2000 Hz
  - Overload protection: 150 % of (Max)
  - Selectable measuring units: N, lb, kg, kN, t
  - Turnable display with backlight

- **Model: Quick-check**
  - Tension capacities: 10000 lb/45 kN/4500 kg
  - Wire sizes: 3/16 inch through 1 inch
  - Accuracy: +3% instrument capacity
    (calibrated to specific wire size & type
    +5% with same wire diameter as calibrated but different wire type)

**Indicating Torque Wrench**

- **Model: TB306WG3**
  - Range Resources: 6-30 Nm
  - Lever-type ratchet (L): 3/8 Inch

**Gloss Meter, Roughness Meter**

- **Model: ISR - CS130 - W**
  - Flat lapping: 0.05, 0.1, 0.2 μm
  - Reaming: 0.4, 0.8, 1.6 μm
  - Plain grinding: 0.05, 0.1, 0.2, 0.4, 0.8, 1.6 μm
  - Horizontal milling: 0.4, 0.8, 1.6, 3.2, 6.3, 12.5 μm
2.2. Non-Destructive Testing

**Video Borescope**

Model: HDV650W - 30G
- 25mm camera head (60° FOV, long depth of field) with built-in bright 12 LEDs for illuminating the problem areas
- Wireless handset/transmitter with brightness and

**Ultrasonic Flaw Detector**

Model: Proeq 100 (has UT/TOFD)
- Configuration: 2 UT Channels
- Transducer Socket: Lemo 1 and BNC
- Pulse Voltage: -100 to -450 V (in steps of 10 V)

**X ray-Machine**

Model: XXH - 3205
- Output voltage (Kv): 180 - 320
- Input (KW): 3.2
- Focus spot (mm): 1.0 x 4.0
- Level target: 25° ± 5°

**Thickness Gages**

Model: UTG M3
- Probe Style: 5 MHz Contact
- Mode: Single Echo
  - Measurement Range: 1.00 to 125.00 mm (0.040° to 5.000°)
- Mode: Multiple Echo
  - Measurement Range: 2.50 to 60.00 mm (0.100° to 2.500°)
- Thru-Paint Capability: yes
- Measurement Rate - Normal: 4 readings/sec

**Hardness Meter**

Model: ISH - SPHA
- Steel & cast steel: 20-68(HRC), 38-100(HRB), 81-654(HB), 81-955(HV), 32-100(HS), 375-2639(Mpa)
- Cast iron: 93-334(HB)
## Hardness meter

**Model: HR1500**
- Load cycle: 3 ~ 8s
- Load dwell duration: 2 ~ 50s, can be set
- Resolution: 0.1HR
- Display: High definition backlight LCD
- Operation: Menu selectable, Membrane keypad

## Concrete Test Hammer

**Model: HTH - 225 V**
- Measuring ranges: 10-60MPa
- Impact energy: 2.207J
- Spring constant: 785N/m
- Spring extension: 75mm

## OpticScan 3D Scanners

**Model: OpticScan - DL - Classic**
- Measuring Area by single Scan: 400mm x 300mm (adjustable)
- Accuracy: 0.04mm - 0.02mm

## Eddy Current Conductivity Meter

**Model: HEC102**
- Measurement technology: Eddy current
- Operating frequency: 60KHz
- Instrument case: Anti-intense impact, water-proofing polyester

## CNC Measuring System

**Model: IMI-AF250**
- Measuring Range(XYZ): 250*150*150mm
- Resolution: 0.001mm/0.00005"
- Measuring Accuracy: \( \pm (2 + L/200) \mu m \) (X, Y Axis)
- Main structure: DIN 00 grade granite table master base & Z axis T type granite column
Profile Projector

Model: HB - 16
Sturdy metal design with the novel shape
Excellent optical path with the sharp image
Large X, Y measuring travel stage with the precision accuracy (3 + L/50) μm
Digital Multifunctional digital readout DC5000 with the strong process function
Touch panel switch protects the operator’ safe
Screen diameter: φ 400 mm (16”)

Microscope

Model: ISM - PM200SB
Magnification: 10X - 200X
Pixel: 2M (1600 x 1200)
Type: short focus distance
Illumination: built-in adjustable LED
Focus support: included
Power supply: USB 2.0 cable (voltage required: 5 ± 0.1V)

Handheld X-ray Fluorescence Spectrometer

Model: XRF Pocket 110
Wide range of measurable elements: Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Nb, Mo, Sn, Hf, Ta, W, Re, Pb, Bi, Se, Sb, Pb, Au and Hg
Working principle: XRF analysis exploiting X-ray

Coating Thickness Meter

Model: 6000 FNS3
Non-Conductive coatings on Non-Ferrous Metals Aluminum, Copper etc.
Non-Magnetic coatings on Ferrous Metals (Steel & Iron)
- Range: 0 - 1500 μm (0 - 60 mils)

Adhesion Tester

Model: ATA20A-B

<table>
<thead>
<tr>
<th>Dolly size</th>
<th>Max Pull-Off Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mm (option)</td>
<td>10000 psi</td>
</tr>
<tr>
<td>14 mm (option)</td>
<td>6000 psi</td>
</tr>
<tr>
<td>20 mm* (include)</td>
<td>3000 psi</td>
</tr>
<tr>
<td>50 mm** (option)</td>
<td>500 psi</td>
</tr>
</tbody>
</table>

Page 26  Testing & Measuring Everything
Gold and Diamonds Tester

Model: TD GOLD 40
- Measuring head diameter: 6 mm
- Measuring range (Max): 22,500 cm (steel), 4 cm (gold)
- Precision (of (Max)): 0.005
- Readout (d): 10 µm
- Test frequency: 5 MHz

You can use the TD-GOLD to determine whether gold bars and coins are genuine or whether they contain a core of a different material. The instrument measures the thickness of gold bars and gold coins using ultrasound.

Cover Meter & Rebar Detector

Model: Profometer PM-630
- + Cover Measuring Range: Up to 185 mm (7.3 inch)
- + Cover Measuring Accuracy: ± 1 mm to ± 4 mm (0.04 to 0.16 inch)

Permeability Test

Model: Torrent
- Memory: non-volatile memory for 200 measured objects
- Display: 128 x 128 graphic LCD
- Interface: RS232 or optional adapter to USB

Ultrasonic Pulse Velocity

Model: 5100
- Acoustic transit time accuracy: 0.025 µs
- Dynamic range: 154 dB
- Receiver sensitivity: ≤ 10 µV
- Emission voltage (V): 65, 250, 500, 1000 V adjustable
# II - MECHANICAL AND INDUSTRIAL EQUIPMENT

## Rebar Corrosion Detection

**Model:** ZBL - C310A  
- Measuring range: ±1000mV  
- Accuracy: 0.1mV  
- Single electrode:  
  - Tested points interval X: 0 ~ 100 adjustable  
- Double electrode:  
  - Tested points interval X: 20 fixed

## Floor Clab Thickness Meter

**Model:** CH800 - A  
- Thickness test range (mm): 40 - 600  
- Thickness test accuracy 40 - 400 (mm): ≤ ±1mm  
- Thickness test accuracy 401 - 600 (mm): ≤ ±2mm  
- Data storage capacity: 40000 test point data

## Pull Off Tester For Concrete

**Model:** DY - 206  
- Dimensions of housing: 109 x 240 x 205.5 mm  
- Operating temperature: -10 to 50°C (14 to 122°F)  
- Storage temperature: -10 to 70°C (14 to 158°F)  
- Display: in N/mm² based on dia. 50 mm test disc

## Steel Structure Analyzer

**Model:** KRC - M2  
+ Measurement of coercive force  
+ Current measurement  
+ Code measurement (units)  
+ Additional scale for calibration

## Temperature & Humidity Test Chamber

**Model:** SH - CTH40TSC  
- Time Range: -15°C ~ 150°C  
- Humidity Range: 30%~99% at Temp 20°C ~ 80°C  
- 30%~95% at Temp 20°C ~ 85°C  
- 25% at over 85°C

---

**Page 28**  
**Testing & Measuring Everything**
### 3.3. Bearing tools

#### Bearing Heaters

**Model: 24RSDi**  
Device indicated for heating bearing, gear...  
Power: 3.6 KVA  
Voltage: 230V  
Frequency: 50/60 Hz  
Max. temperature 240 °C

#### Pullers

**Model: HXPM 100 t**  
Capacity in tons: 100  
Max. stroke in mm: 270 with 4 adapters extensions 900 mm  
Max. spread in mm: 1500  
Min. spread in mm: 200  
Max. shaft length in mm: 1215

#### Hydraulic Pullers

**Model: HSP 303**  
Capacity: 30 ton  
Shaft length Max: 465mm  
Spread Max: 680 mm  
Stroke: 111 mm

#### Toolset Impact 39

**Model: IMPACT 39**  
This fitting tool set has been specially designed for quick, accurate and safe mounting of bearings with a bore varying from 10 to 60 mm.
### 5.4. Hydraulics, Lifting Equipment

#### Hydraulic Cylinders

**Model:** JLLC400112  
- Capacity (ton): 400  
- Max. working pressure bar: 700 Bar  
- Stroke mm: 300  
- Height Retr. mm: 585  
- Height Ext mm: 885

#### Bottle Jack

**Model:** MH - 100Y  
- Capacity: 100 ton  
- Min Height: 305 mm  
- Lift: 145 mm

#### Hydraulics Pumps

**Model:** HC2000 SET  
- Materials: Steel  
- Pressure rating (bar): 700  
- Usable oil capacity cm³: 2000

#### Hydraulic Spreader, Lifting

**Model:** 25 TLS SET  
- Capacity (ton): 25  
- Max. spread mm: 16  
- Min. spread mm: 5  
- Max. pressure bar: 700
EMIN
Testing & Measuring Everything

IoT cloud

Internet of Things

Planning
Engineering
Operation

Intelligent Substation

Testing & Measuring Everything
### PLC S7-300

**Model:** 6ES7314-6CH04-0AB0  
SIMATIC S7-300, CPU 314C-2 DP  
COMPACT CPU WITH MPI,  
24 DI/16 DO, 4AI, 2AO, 1 PT100,  
4 FAST COUNTERS (60 KHZ),  
INTEGRATED DP INTERFACE,  
INTEGRATED 24V DC POWER SUPPLY,  
192 KBYTE WORKING MEMORY,  
FRONT CONNECTOR (2 X 40PIN) AND MICRO MEMORY CARD REQUIRED

### HMI S7-200/300/400

**Model:** 6AV6644-0AA01-2AX0  
SIMATIC MP 377 12” TOUCH  
MULTIPANEL, WINDOWS CE 5.0  
12” COLOR-TFT-DISPLAY  
12 MB USER MEMORY  
CONFIGURABLE FROM WINCC FLEXIBLE 2007

### Inverter Siemens

**Model:** 6SE6440-2UD42-0GA1  
Inverter power: 200 kW.  
Power supply: 3 phase 380-480V, 45-63Hz.  
The frequency range: 0.1 - 650 Hz.  
6 programmable digital inputs,  
2 analog inputs,  
2 analog outputs: 12.25 - 20mA,  
Dimensions H x W x D: 1533 x 326 x 545.  
Output relay: 3.  
Method of control: V / f, Vector, Moment; control information flow from the FCC.  
Overload capability: 136% 57S, 160% 3s.

### Soft starter Siemens

**Model:** 3RW4076-6BB44  
SIRIUS SOFT STARTER, S12,  
432 A, 250 KW/400 V, 40 DEG.,  
200-460 V AC, 230 V AC,  
SCREW TERMINALS
MCCB 3 phase

Model: ABS1203b1200A
Number of poles: 3
Rated current: 1200A
Short circuit current: 65kA

Contactor

Model: MC-800a
Number of poles: 3
Rated current: 800A
Coil voltage: 220VAC
Auxiliary example: 2NO + 2NC

Thermal Overload Relays

Model: MT-800 (520-800A)
Number of poles: 3
Current: 520 - 800A
Voltage input: 380V

Capacitors

Model: 50KVAR/415V
Size: 50KVAR
Voltage capacitor: 415v/3P-50Hz
EMIN at Agroviet 2013

EMIN Draminski the workshop from South to North

EMIN at Techmart 2013
EMIN at Agroviet 2014

EMIN at Expo 2014

EMIN at VIIF 2014
EMIN at E&A HaNoi 2015

EMIN at NEPCON Vietnam 2015

EMIN at E&A HCMC 2015

EMIN at Techmart Hanoi 2016
Global Technology supply and demand Connection point

EMIN at NEPCON 2017

EMIN in Vietnam International Industrial Fair (VIIF) 2017

EMIN at VINAMAC EXPO 2017
EMIN Vietnam Joint Stock Company
Website http://emin.vn

Offices in HaNoi City
No. 8A, Hoang Cau Moi Street, Dong Da District, Ha Noi, Vietnam
Tel: (84-24) 35.38.12.69 - Email: hn@emin.vn

Offices in Ho Chi Minh City
No. 218, Cong Hoa Street, Tan Binh District, Ho Chi Minh, Vietnam
Tel: (84-28) 38.11.96.36 - Email: hcm@emin.vn

Offices in Da Nang City
No 112A, Le Dinh Ly Street, Thanh Khe District, Da Nang, Vietnam
Tel: (84-236) 374 77 11 - Email: dn@emin.vn