

TECHNICAL SPECIFICATION FOR
4 CHANNEL IMPULSE MEASURING AND ANALYZING SYSTEM

FEATURES :

- 4 Channel High Precision digital Impulse Measuring & Analyzing system.
- Automatic evaluation of all Impulse shapes and their parameters.
- Fully automatic hardware calibration using with any Impulse calibrator.
- Clear documentation & reporting, Windows XP based supporting software for making test reports .
- The measuring system should be loaded with all analyzing functions like, Difference function, FFT transfer, Coherence function & Smoothing etc.
- It should fulfill the requirements of IEC-61083, part-1 & 2 and IEC-60060, part-1 & 2.
- It should be supplied with 4 channel fully remote controlled Impulse calibrator .

SYSTEM :

- No. of channels : 4 ✓
- Bandwidth : 50 MHz on each channel
- Sampling Rate : 120 MSPS ✓
- Amplitude Resolution : 12 bit ✓
- Coupling : AC / DC
- Connector : Lemo connector
- Input Voltage : 10 V_{pp} to 1600 V_{pp} with inbuilt attenuator
- Over Voltage Protection : 2000 Volts max.
- Offset : Automatic to zero

specifications and conditions mentioned at note 1 & 2, is in successful & satisfactory operation in India for last three or more years, and **Performance Certificate of this above Equipment from the utilizer's end with address and contact details of that utilizer should be submitted, along with their technical Bid.**

4. Literature on features and operations with photographs of the Instrument and its accessories should be submitted with the technical offer .
5. Specimen of auto generated printout of a sample waveform should be submitted with the technical offer .

Mandal
14/7/12
(एस० एन० मंडल)
(S. N. MANDAL)
वरिष्ठ प्रबन्धक (परीक्षण)
Sr. Manager (Testing)
बी० एच० ई० एल०, झांसी
B.H.E.L., JHANSI

[Signature]
16/7/12
(KULSHRESTHA)
Addl. General Manager
(RE, RPD, FES & Testing)
B.H.E.L., JHANSI

- Operating Condition –
 - i) Supply Voltage : 230 Volts , 1Ø , 50 Hz
 - ii) Temperature Range : 10 to 40⁰C
- Printer : Laser Printer 1200 dpl
- Monitor : Desktop TFT flat screen , 19"
- System Controller : ≥ Pentium IV, ≥ 256 MB RAM
- Internal Operating System : Windows XP
- Data Handling – storage medium : Floppy 1.44 MByte, 3.5"
Hard disk ≥ 80GByte
CD / DVD – RW Drive

CALIBRATOR :

- No. of channels : 4
- Maximum output voltage : Should not be less than **1600 volts**
- Operation : Fully Automatic and Remote controlled (# note 1)
- Calibration of LI, LIC, SI & STEP waveforms : Should be done simultaneously for all these four type of waveforms (*note 2)
- Conforming standards : IEC-61083, part-1 & 2

Notes :

1. # Fully Automatic and Remote controlled operation means no human intervention is required after the calibration process started by the calibrator.
2. * The Calibrator should be able to calibrate Lightning Impulse (LI), Lightning Impulse with Chopped (LIC), Switching Impulse (SI) and STEP waveforms simultaneously. For the case of any one of the above waveforms the Calibrator is calibrating one after another or, separately, - is not acceptable to us.
3. **Qualifying condition** for bidder : Only those bidders should quote whose Equipment, i.e., 4-Channel Impulse Analyzing & Measuring System with 4-Channel fully Automatic & Remote controlled Calibrator conforming to our above