

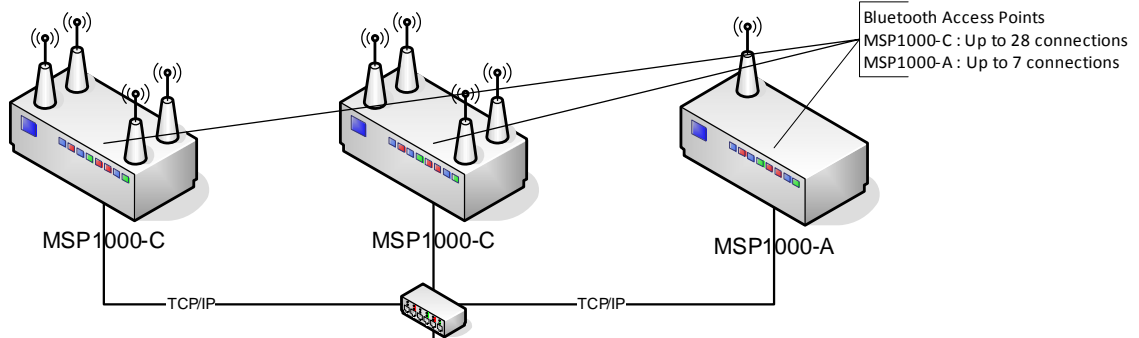
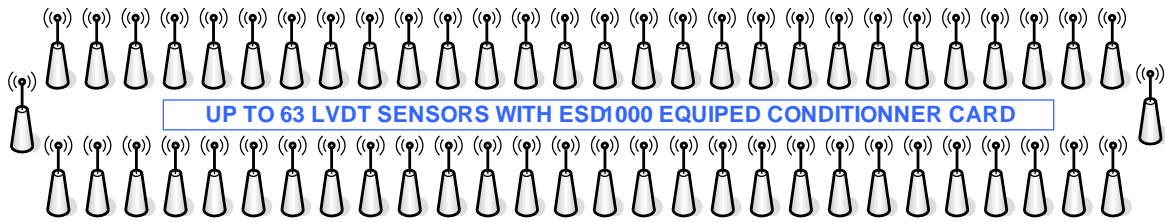
ICS CONSULTANTS offers an electronic card that performs conditioning of measurements from LVDT and the transmission of scaled values by Bluetooth connection.

Access to the sensor can be individually by Bluetooth connection from a PC or through an access point via Ethernet. Access points, depending on the model used, are able to connect from 7 to 28 sensors. The installation of as access points as necessary permits to build networks of wireless sensors.

- Double sided printed board
 - Dimensions 100mm x 50 mm
 - Indicators state by LED (connected, charging,...)
- Power Choice
 - External from 8 to 30Vdc
 - Battery :
 - 2 accumulators AA type
 - Charging module embedded under 24VDC
 - Autonomy : 6h to 24h following configuration
- Sensor Conditioning
 - Designed for 3 windings LVDT
 - Oscillator 3Vrms 5KHz
- Acquisition
 - 16 bits Analog To Digital Conversion
 - Acquisition Rate : Settable up to 100 Hz
 - Precision : 4 μ m with a sensor +/-5mm type SOLARTRON AX5S.
- Linearization
 - Linearization array saved in E2Prom (up to 51 couple of points)
 - Windows Software designed to enter couple of valuesooth
 - E2Prom Writing and Reading using Bluetooth
- PIC Controller
 - Evolutive Firmware
 - Set of Instructions for the unit control
 - Linearization ON or OFF
 - Stand-By
 - Stop
 - Version Management
 - E2Prom R/W
 - Measurement message including counter value used to check the synchronization.
- Wireless
 - Bluetooth Module ESD1000 V2.0 + EDR
 - Max range with 1 Dbi Antenna : : 100 m.
- Maintenance
 - RS232 wired connectivity
- Full Software developed onto LabVIEW platform
 - Visualization and Graphical presentation of measurements
 - Data logging to ASCII File
 - Calibration module.



ICS CONSULTANTS REALIZATION SAMPLE Implementation of 58 sensors Network for elongation measurements. Data Acquisition by TCP/IP link through 3 BlueTooth reception bases placed around the machine.



Data acquisition made by reading of the 63 TCP/IP port Softwares made under LABVIEW Platform :

- Graphical presentation and data logging
- Calibration Module

