4 : SISTEM INSTRUMENTASI

SISTEM PENGUKURAN

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ISI KULIAH

- Konfigurasi Sistem Instrumentasi
- Elemen Sistem Instrumentasi
- Contoh-contoh Sistem

KONFIGURASI SISTEM INSTRUMENTASI

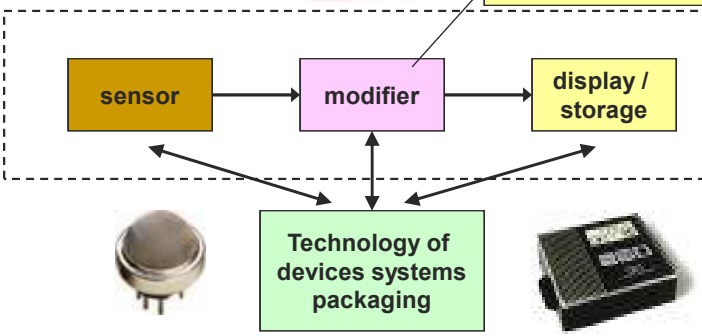


Sistem Instrumentasi





amplification, filtering, calibration, linearization, noise and offset reduction, and other operations preparing raw sensor output signal for signal processing.

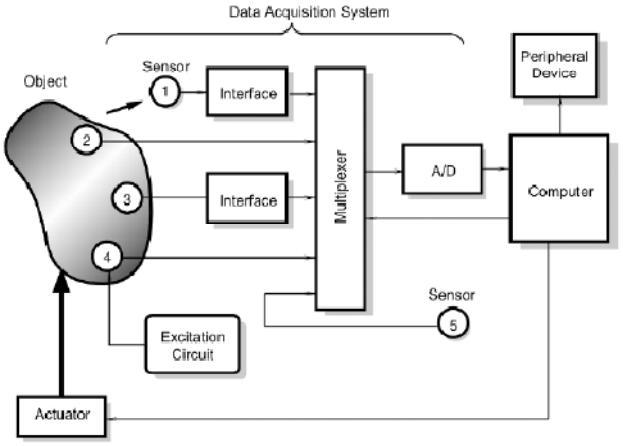


Modern Instrumentation:

- Part of the Bluetooth communication system
- Equipped with smart sensors
- Low powered (battery-operated) and safe
- Externally programmable
- Self calibrated and give its identification
- Mass fabricated as one-single chip (system on chip), small, rugged, stable and cheap

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Sistem Akuisisi Data - umum

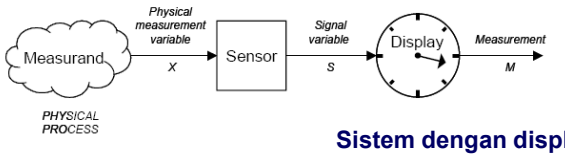


Sensor 1 : Non contact
Sensor 2 & 3 : Passive
Sensor 4 : Active
Sensor 5 : internal to a data acquisition system

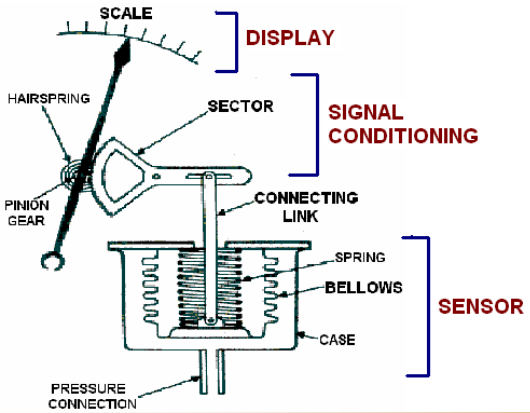
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Sistem Instrumentasi – Sistem Akuisisi Data



Sistem dengan display analog

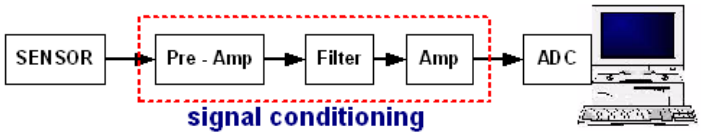


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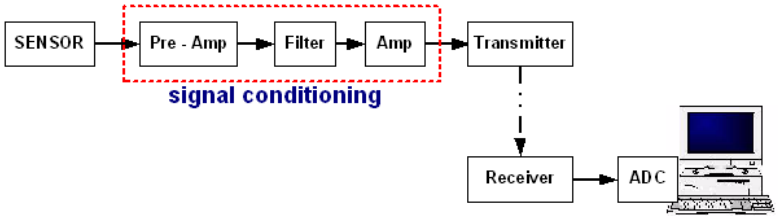
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Sistem Instrumentasi

Sistem dengan display digital



Sistem dengan transmisi data & display digital

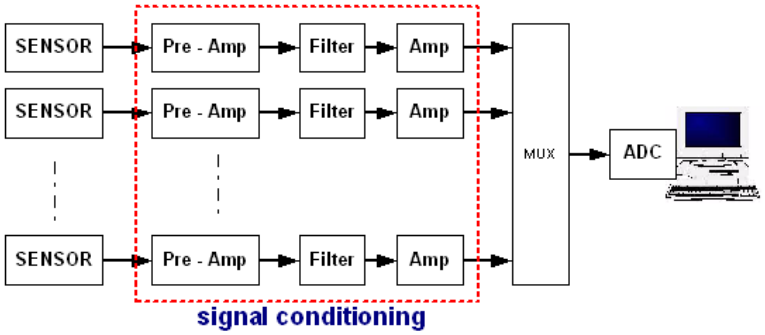


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Sistem Instrumentasi

Sistem multisensor dengan display digital

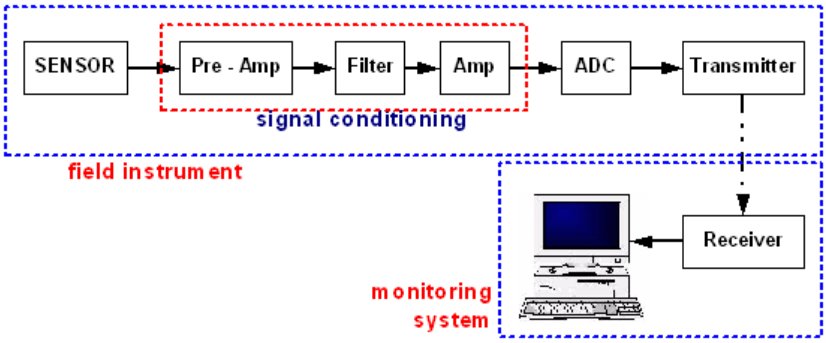


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Sistem Instrumentasi

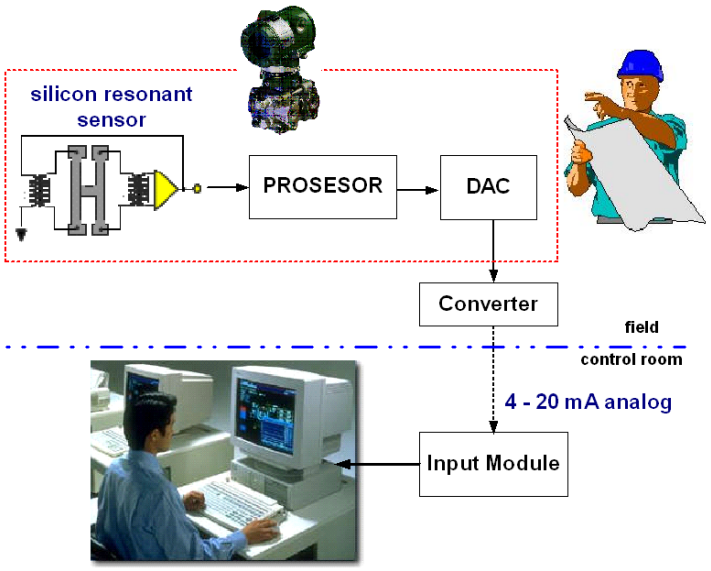
Sistem digital dengan transmisi data



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Contoh : Sistem Akuisisi Data *tekanan* di industri



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