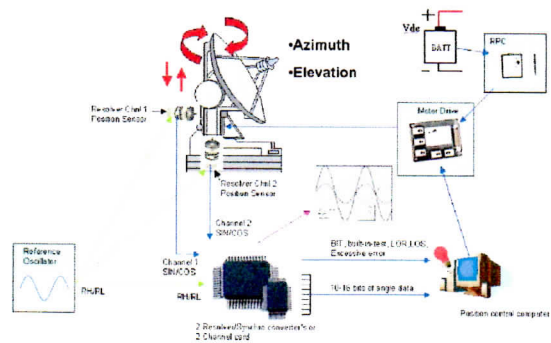# Solutions

Synchro to Digital Convertor

Synchro to Digital convertor is transducers/that converts the angular position and/or velocity of a rotating shaft to an electrical signal. A Synchro-to-Digital converter is used to convert these signals to a digital output corresponding to the shaft angle and/or velocity.

Applications

▷ Antenna Pedestal Control
▷ Military Fire Control System
▷ Naval Navigation
▷ Weapon System
▷ Robotics Positioning
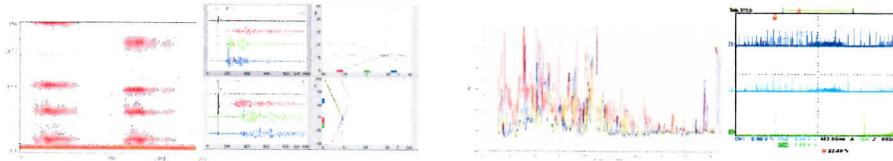▷ Mortor Control
▷ Jet Engine Control
▷ Factory Automation

Solution Diagram

Emergency detector of air respirator user using RF communication technology

Features

▷ Monitoring pressure of air respirator
▷ Monitoring temperature around fireman
▷ Monitoring fireman's motion
▷ Quick-fill system
▷ PASS (personal alert safety system)

PPDM-PM (Portable Partial Discharge Monitor and Position Measurement) System

AWT's UHF PPDM-PM detects the PD (Partial Discharge) for HV GIS, High Tension Transformer and measures the position of PD. PPDM-PM is used to undertake periodic partial discharge surveys in sub stations to provide early warning of developing faults-enabling corrective action to be taken before the complete breakdown occurs.
PD data from up to 3 UHF sensors is collected and stored, and the type of defect is identified automatically through the in-built expert system analysis program.
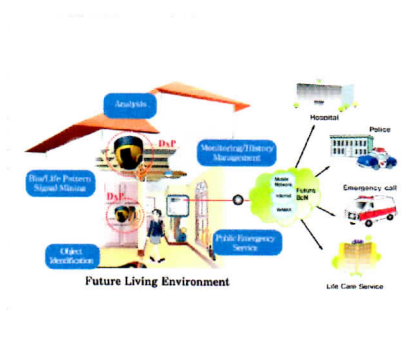
Features

▷ PD Position Measurement
▷ PD is interpreted automatically by expert system program
▷ Detects faults before failure, damage
▷ Fully protected against transient
▷ Usable for HV GIS, Transformer
▷ Automatic Self-Test
▷ External Sync : 5 ~ 10 VAC, 50 ~ 280 VAC

Applications

▷ PD tests on high voltage equipment
▷ PD diagnosis on developing insulating materials
▷ Designed for on-site PD diagnosis tests as well as for manufacturing and research
▷ Measure PD fault location for GIS, Transformer, Power cables

U-Healthcare (Sensor Module)

Monitor health status using Bio and space fusing sensor information

Future Living Environment

Features

▷ Bio-radar sensor measure heart rate and breath number
▷ IR camera provides body temperature and thermal image
▷ CCD camera provides color image
▷ Voice and image recognition provides user ID
▷ Send ID and Bio signals (Heart rate / Breath / Body temperature) to DxR
▷ DxR analyzes and provides health care service using the Bio signals