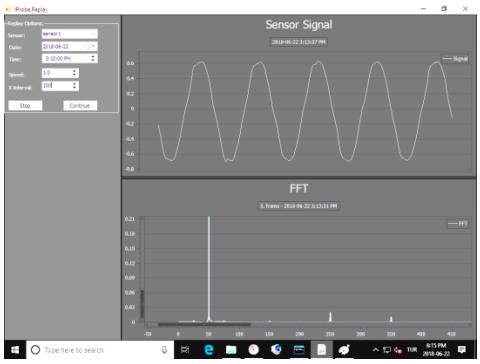
Ascenix ADCR 100 Series and iProbe Platform



Overview

Ascenix combines compact but powerful data acquisition hardware with a fully integrated data processing platform, aiming at leveraging the effectiveness of cloud based predictive analytics.

The ADCR units collect high speed (i.e. up to 64 KHz.) multi-channel simultaneous data and upstream to edge computers via TCP/IP. Remote configuration tool enables users to change sample rate, duty cycle, etc. on demand and route collected date to desired destination including AWS S3. Compression and transformation tasks can also be run on the edge computers, pre-transfer to cloud.

VI (Voltage-Current) type ADCR units contain a front-end with direct 480 V inputs and current terminals for directly connecting various types of CTs.

Vibration type ADCR units contain a front-end with four IEPE type accelerometer inputs

Technical Specs

MCU powered DAQ Unit

AD Conversion Resolution: 12-bit (0-4095)
AD Conversion Method: Successive approx.
AD Conversion Mode: Scanned
Conversion time: 1 µS (per channel)
Sampling Rate: up to 64 KHz on 8-channels sim.
Ext. Trigger Options: Proximity Sensor (for vib units)
Communication: 10/100 Mbps Ethernet/TCP-IP
Data Transfer Rate: 8 Mbps @ 64 Khz-8ch
On-board RAM buffer: 16 MB

VI Front-end
Voltage Input Range: 0-480 V x 4
Impedance: > 1 G Ω
Current Input Range: 333 mV x 4 or ± 50mA
Impedance: 51 Ω

Vibration Front-end
Sensor Input Range: ±5 V – IEPE type sensors

General Specs
Operating Temperature: -40-85 °C
Power Requirements: 24V - 400 mA vib units
24V - 200 mA VI units
NEMA Box: 100-240V- <1A
(DAQs, Router/Switch, Fanless PC)

Dimensions:
DAQ Units: 122x92x58 mm (LxWxH)
Metal box enclosure: 165x127x65 mm.

Software

Hosted on Edge Computers
ADCR Driver and local storage
Compress, transform, format and route utilities
Hosted on any connected computer
Device Control and Management Console
Hosted on Server or Cloud
Relational database for device config and status
Remote storage

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