

# Applied Automation & Controls Inc

## Titan - Next Generation Data Acquisition Unit



The Titan sensor acquisition unit is a self-contained rugged and efficient oilfield data acquisition system specifically designed for well servicing operations. The unit is extremely rugged and designed for harsh environments.

### Highlights

The Titan is designed with the latest electronic hardware component technologies and not be in danger from obsolescence for 10 years.

The NexGEN unit has been design to be a drop in replacement for the existing hardware and is protocol compatible with the CAT software. With a wide operating voltage range in increased I/O count it will allow for backwards compatibility while giving new applications increased capabilities. Additionally with the high speed Ethernet, CAN and Serial ports it can be used to replace multiple boards in the customers system, thus reducing cost and complexity.

The NexGEN is equipped with 16 24-bit analog inputs, 8 frequency channels, 4 analog outputs and 8 PWM channels. This enables a single NexGEN unit to be used to acquire data a large amount of data without requiring any slave boards etc.

The unit has been designed for future SIL certification and has the redundancy building blocks already in place.

### Technical Specifications:

#### Environmental Specifications:

Operating Temperature	-30C to 70C
Storage Temperature	-40C to 90C
Enclosure Rating	IP67, NEMA 6
Relative Humidity:	To 95%

#### Input Output Specifications:

Power Supply	9-36VDC, 150mA
Analog Inputs	8 x 4-20mA 24bit 8 x 0x10V 24bit (up to 1kHz)
Analog Outputs	4 x 4-20mA x 16bit
Digital/Frequency Input	8 x up to 50kHz
Depth Inputs	2 x up to 50kHz
Digital Outputs	6 x 1A DC PWM 2 x 4A Isolated PWM

#### Processor Specifications:

CPU Type	32-bit ColdFire-V4e
CPU Speed	250MHz
ROM Memory	32MB Flash Memory
RAM Memory	64MB DDR2 Memory
Data Memory	Micro SD Card 16GB

#### Communication Ports and Protocols:

Serial Ports	2 x RS232
CAN Ports	1
Ethernet Ports	100BaseT
Other	I2C, SPI, USB
Display	LCD w/ backlight
Protocols	TCPIP, HTTP, FTP MODBUS, ASCII, WITS-0, datascribe Network-Update

#### Physical:

Dimensions	8.0 x 8.0 x 2.75 inch
Weight	6.5 lbs
Material	Aluminum

Part Number 00-92401

