

#### Key Features:

- IEC-61131 Ladder and Structured Text Execution
- Huge Programming Space
- High Speed Execution: PIDs in less than 0.2 Milliseconds.
- Extensive Special Function Block Library – in Structured Text.
- Direct Digital I/O Reads and Writes
- Multi-Tasking
- Supports access to external Modbus Devices, coils and registers.
- Full math functionality; SQRT, EXP, POWER, MULT, DIV, LOG10, LOG, SIN, COS, TAN, etc.
- Modbus Compatible
- Modbus Master & Slave
- Modbus RTU & TCP

## Data Sheet

### Description

The **AnchorPLC**<sup>TM</sup> system is a complete execution run-time system for embedded control. The system provides for logic execution on OPTO 22<sup>®</sup> brains for control programs developed in IEC 61131-3 Ladder and Structured Text. **AnchorPLC** offers an efficient execution environment, with full math function, extensive Modbus support, easy-to-use digital and analog I/O. Full floating point PIDs execute within 0.2 milliseconds on the OPTO 22 SNAP-ADS Ultimate Brain<sup>®</sup> (yes - a fraction of a millisecond).

High speed timers and counters, with 1 millisecond resolution; special direct digital I/O for reading and writing discretes for high speed precision applications are found in the **AnchorPLC** solution. The system also provides execution of customer defined Special Function Blocks, written in either the Ladder or Structured Text Languages.

The system reads and writes serial RS-232 or RS-485 to support custom protocols. Binary and text are supported. An extensive set of text parsing functions and text generation is facilitating special protocol applications.

**Modbus** support includes Modbus/RTU, Modbus/TCP, Slave and Master. Daniels floating point register access is provided.

Retentive memory is stored in battery backup up RAM. Reads and writes are done at the high-speed RAM memory speeds.

The system clock is synchronized with an on-board real-time clock that provides battery backup-up operation even through extended power-off cycles. Applications can read, use and update the real-time clock.



TM

# AnchorPLC



Applications from simple to extremely complex run within **AnchorPLC**'s huge programming space. The system has easy-to-use multi-tasking capability. Our customers have built full hydroelectric power plant control systems with complete simulation, running on the OPTO 22 Ultimate Brain with **AnchorPLC**.

The **AnchorPLC** system has been hosted on several operating systems: Windows NT<sup>®</sup>, Windows<sup>®</sup> 2000, Nucleus RTOS (OPTO 22 UIO), Linux and several others. Any application that is built to run on the **AnchorPLC** system will run on future embedded systems, providing a technology upgrade path for those who develop within the **AnchorPLC** environment.

**AnchorPLC** has been running in mission critical applications since 1993 on Windows NT servers and the same reliable run-time engine has been delivered to critical applications on OPTO 22 Ultimate brains over the last three years.

The custom control programming of IEC 61131-3 and the extensive Modbus capability makes **AnchorPLC** a great solution where performance or IEC programming is a must.

**Performance Software Associates, Inc.**  
2305 E Arapahoe Rd, Centennial, CO 80122  
303-797-3385 [www.performancesw.com](http://www.performancesw.com)