

SCANTRACK Model 1208 Remote Terminal Unit



General Description

The Willowglen Model 1208 Remote Terminal Unit (RTU) is an advanced intelligent electronic device that is used for data acquisition, local/remote control and simple to complex real-time processing of field or plant data.

The compact Model 1208 RTU is designed for medium size sites. Up to eight field I/O cards can be installed in the main RTU chassis and expansion chassis can be easily added.

Willowglen's RTUs provide the best solution for a wide variety of control system requirements. The entire spectrum of sizes is easily accommodated with Willowglen's intelligent RTUs since they have plenty of processing power for large I/O systems and calculation intensive applications.

The Model 1208 RTU can be housed in a NEMA/CEMA enclosure or in a standard 19-inch rack mount enclosure with a back plate.

The field proven RTU software is available for a broad range of process applications such as liquid pipeline flow meters, gas well flow control, plant process control and electrical utility power distribution monitoring and control. The RTU features the advanced flow chart based Programmable Acquisition and Control (PAC™) software for user defined processing and control algorithms. Using PAC™, custom timing, logic and calculation functions are easily implemented.

Available mechanical sealing and a Flash memory event logger allow the Model 1208 RTU to have complete Industry Canada - Legal Metrology Branch (#AG-0342) approval for Canadian gas custody transfer applications.

Features

- Powerful NEC V53 16-bit microprocessor and 80287 math co-processor
- Very large memory capacity
- 250+ I/O point capacity
- PAC™ flow chart based programming language
- Disconnectable field termination blocks for convenient access to field I/O cards without the need to remove field wiring
- Modular design allows customer specific configurations
- 8 I/O card slots per chassis
- Optional expansion to 4 chassis for a total of 32 field I/O cards
- Unitized construction for easy maintenance
- CMOS components for low power, wide temperature applications
- Multiple serial communication ports
- Ethernet option available
- Available with Man Machine Interface (MMI) console

Model 1208 RTU General Specifications

Basic Building Blocks

- **Processor:** An Intelligent System CPU (ISC) module conveniently plugs into the chassis backplane to connect to the field I/O cards and power supply module.
- **Input/Output:** Field I/O is provided through a user defined flexible combination of several types of standard input/output cards.
- **Communications:** Several serial and modem communication formats are supported.
- **Power Supply Module:** Removable power supply conveniently plugs into the RTU chassis backplane.
- **MMI:** An optional LCD display/keyboard console unit can be mounted on the enclosure door and connected by cable to the ISC module

The main Model 1208 RTU chassis includes an ISC module, a power supply module, a backplane with eight I/O slots, and zero or more I/O cards. For applications requiring extra I/O capacity, up to three expansion chassis can be added for a maximum of 32 I/O cards in a single RTU.

Power Supply Module

Input power is provided by a modular, removable power supply for 12 VDC, 24 VDC, 48 VDC, 129 VDC, 120 VAC and 240 VAC sources (with optional redundancy and battery backup).

Processor Module

- **Processor:** Powerful 16-bit (NEC V53) with optional 80287 floating-point unit.
- **RAM:** Battery backed up RAM
- **ROM:** Flash memory devices for storage of configuration and operating program. Program updates may be performed remotely using the communication channel.
- **Boot ROM:** Flash memory device for Boot, monitor, system diagnostics, and configuration settings
- Crystal controlled real-time clock
- Watchdog Timer
- RS-232 serial communication ports support various communication protocols and maximum data rates of at least 38,400 bps.

Input/Output Modules

ACI-11519 Accumulator Interface (3 accumulators)
ASI-11516 Analog Scanner Interface (8 inputs)
ASM-11524 AC Sense Interface (8 inputs)
COD-11606 Chec-kback Output Driver (8 outputs)
DAC-11518 Digital to Analog Converter (4 outputs)
DCI-11517 Digital Contact Interface (8 outputs)
DCI-11654 Digital Contact Interface (16 inputs)
DSI-11605 Digital SOE Interface (8 inputs)
FRI-11665 Flow Rate Interface (2 meters)
GPS-11749 GPS Reveiver Interface
MPI-11664 Meter Prover Interface (2 provers)
ROI-11521 Relay Output Interface (Form C) (6 relays)
ROI-11520 Relay Output Interface (Form A) (8 relays)
RSI-11699 RTD Scanner Interface (4 RTDs)
TOD-11620 Transistor Output Driver (16 outputs)

Field wires are terminated using screw terminals provided by the standard pluggable field termination connectors that allow convenient card removal and replacement without disconnecting field wiring. Terminals are rated for 250 Volts, 12 Amps and accommodate 22 to 12 AWG wire.

The I/O cards meet the ANSI/IEEE C37.90 surge withstanding capability.

Please refer to the individual field I/O card product datasheets for more information.

Communications

- Two serial ports are on the ISC module
- Ethernet plus serial ports are on the optional EIO-11796 iSBX expansion card.
- Four additional serial ports are on the SIO-11621 and SIO-11680 iSBX expansion cards.
- Modem and serial port on the MDM-11484 iSBX expansion card.
- Baud rates of 110 to 115,000 supported
- Optional RS-232 or RS-485 serial ports are available

Local User Interface (Optional)

- 4 line by 40 character alphanumeric LCD
- Integral Sealed membrane QWERTY Keyboard with software defined function keys

Additionally, a VISTA™-II based laptop computer can provide a colour user interface when connected to one of the RTU's serial communication ports.

Dimensions and Weight

(Including power supply and I/O cards)

- **Size:** 260 mm x 279 mm x 245 mm
(10.25 in. x 11 in. x 9.65 in.)
- **Weight:** 7.26 kg (16 lb.)

For additional information on specific configurations and pricing, please contact Willowglen Systems Inc.

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