

# WinCOM™ 6.0

*PC-Compatible RTU Communication And Control Software Suite*

**Make your utility or plant operation more productive.** Software is the “intelligence” of any telemetry or “SCADA” system. With WinCOM™ 6.0 at the helm, each RTU is transformed into a master control center... smoothly handling the communications, control, and human-interface functions that make your process operate at peak efficiency and stability.

**Let the software do the work.** WinCOM™ was designed to unleash the full potential of the next generation of high-performance industrial PC platforms - which provide the highest level of speed, memory, and I/O capacity available. With “software-intensive control”, you can expect a system which features less wiring and external electromechanical components, along with simpler installation and maintenance procedures.

**Designed for wireless communications.** Difficult terrain is easily overcome with built-in repeating capability - and the adaptive re-routing algorithm can alter communications paths on-the-fly to compensate for a missing repeater. Channel usage is kept to a minimum by a judicious combination of polling and “report-by-exception”. And by leveraging the most modern military communication technology available, data errors and interference problems are completely eliminated.



**Use it your way.** With the palmtop operator interface in your hand and plugged into an RTU, you can view the communication and control processes of any remote RTU in the wireless network. And if you need to make a change at “the pump station 30 miles across the county”, you can use the palmtop for RTU-to-remote-RTU setpoint modifications.

**True “Distributed” Control.** In master/slave networks, failure of the “master” causes a catastrophic “domino effect” failure of the remote slave RTU’s. In a WinCOM™ network, every RTU is a master, following its own resident set of control logic instructions.

**When control requirements change, you’ll be ready.** When your utility operation evolves, additional inputs and outputs can be easily added, along with the programming logic needed to control them. In most cases, logic upgrades can be transmitted via modem from our facility to yours.

**NAVIONICS RESEARCH**

[www.wireless-telemetry.com](http://www.wireless-telemetry.com)

(888)993-3554

# ***On-Line Palmtop Monitor***



## **Status Monitoring Functions**

View/Test Communication Channel  
View Local Status  
View Local Status History  
Request Remote Status  
View Remote Status

## **Setpoint Editing Functions**

Debug Programmable Control Logic  
Edit Programmable Control Logic  
View Local Setpoints  
Modify Local Setpoints  
View Local Setpoints History  
Request Remote Setpoints  
View Remote Status  
Modify Remote Setpoints

## **Wireless File Transfer Functions**

Get A File From A Remote RTU  
Put A File To A Remote RTU  
Retrieve A Remote RTU's Log File  
View A Remote RTU's Log File  
Reboot A Remote RTU

## **I/O Module Installation/Calibration**

Digital Input Module Installation  
Analog Transducer Installation  
Pulse Counter (Meter) Installation  
Transducer Calibration  
Pulse Counter (Meter) Calibration  
I/O Evaluation Utility

## **Wireless Email Functions**

Create Mail Message-To-Send  
Review Mail Message-To-Send  
Send Mail  
View Contents Of Inbox  
Delete Contents Of Inbox

## **System Setup**

Setup: System Serial Number & Address  
Setup: Network Routing  
Setup: Polling  
Setup: Hardware Configuration

# WinCOM™ 6.0 Specifications

## General

---

Software File System Footprint	450 Kbytes, approx.
Supported Microprocessors	Intel™ 8088, 80286, 80386, Pentium
Setup Info Storage	Non-Volatile Programmable FLASH

## Wireless Communications

---

Addressing	Programmable, 0 thru 255
Routing	Peer-To-Peer
Repeater Method	Store-And-Forward
Repeaters Per Route	Programmable, 0 thru 8
Adaptive Path Re-Routing	Automatic
Error Detection	32-Bit CRC / NAK
Timing	Mixed Polling And "Report-By-Exception"
Compression	IEEE Binary Format
Collision Avoidance	Automatic With Radio CD Input
Communication Status	Monitored And Linked To Control Process

## Control Process

---

Control Language	NCL, Stack-Based
Available Instructions	63
Instruction Types	I/O, Memory Management, Stack Arithmetic, Execution Branching
Word Length	64 Bit (Double Precision)
Stack Length	32 x 64-Bit Words
Register Aliasing	Symbolic (1-48 Characters)
On-Line Debugger/Editor	NDB
Maximum I/O Per RTU	200 Points
Available I/O Types	Analog I/O, Discrete I/O, Pulse Inputs, Wireless I/O "Across-The-Network"
Maximum Control Program	5000 Instructions
Real-Time Clock	Yes, With Y2K-Compliant Date & Calendar

## Operator Interface

---

Electrical	RS-232, DTE, 9-Pin D-Subminiature
Terminal Emulation	ANSI, 25x80
Port Settings	19200 bps, 8 Data Bits, No Parity, 1 Stop Bit
Security	Password Protected Login

**NAVIONICS RESEARCH**

[www.wireless-telemetry.com](http://www.wireless-telemetry.com)

(888)993-3554

# ***Available Support Documentation***

---

## ***Assembly Procedures: WiSTAR™ RTU***

Details the parts and procedures required to assemble a WiSTAR™ RTU, along with the required procedures to load the WinCOM™ Telemetry Software Suite.

## ***WiSTAR™ Control Network Installation And Setup Procedures***

Details the tools and procedures required to install a WiSTAR™ RTU.

## ***Programmable Industrial Control Using WiSTAR™ Networks And The NCL Programming Language***

Definitive documentation of the NCL control logic programming language and the NDB debugger. Tutorial with real-world examples.

## ***WiSTAR™ Control Network Operating And Troubleshooting Procedures***

Details the day-to-day operating and maintenance procedures for the WiSTAR™ RTU, along with common troubleshooting techniques.

## ***Upgrading WiSTAR™ NCL Logic Using The HP-200LX Palmtop & A PCMCIA Flash Memory Card***

Details the parts and procedures required to transfer an NCL control logic program from a PCMCIA flash memory card to a WiSTAR™ RTU.

---