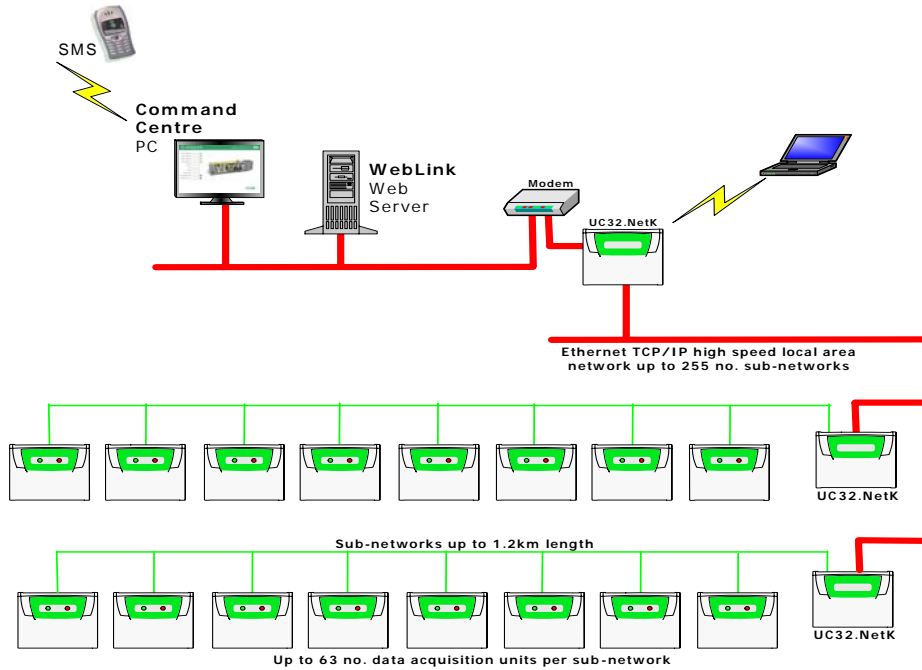


3. Networked Solutions



Remco Overview

Remco has developed a complete range of monitoring and control equipment specifically designed for civil and structural engineering applications. These applications include:

- ◆ Cathodic protection monitoring and control
- ◆ Corrosion monitoring (Condition monitoring)
- ◆ Structural monitoring

The Remco system offers a comprehensive and cost-effective solution to all remote monitoring and control applications. Key features of the system include:

- ◆ Flexible modular design provides economic solutions
- ◆ Proven fast network communications
- ◆ Monitoring of a wide range of sensors
- ◆ Alarm reporting to a range of network devices
- ◆ Operates under MS Windows (versions 2000, NT, XP & Vista)
- ◆ Customised presentation of live and historical data
- ◆ Data acquisition and reporting at operator specified intervals either manually or automatically at pre-scheduled intervals
- ◆ Supports operator friendly supervisor software with on-screen dynamic graphic displays

A comprehensive bureau service is also available whereby Remco will monitor and/or operate the monitoring system remotely and report to the Client at agreed intervals.

Networked Solutions

The Remco system comprises several modular data acquisition and control units with a built-in data communications facility. Each unit has a stand-alone capability and is an 'intelligent' system which may be programmed on site.

Several units may be linked together to form a local area network (LAN). By incorporating a modem and dedicated telephone line or GSM modem to the LAN a full remote monitoring and control system can be established via an IBM compatible office-based supervisory desktop or laptop supervisor personal computer (PC) with modem and communications software.

Data may be collected at operator specified intervals either manually or automatically at pre-scheduled intervals via the supervisor PC. Data may also be accessed locally on-site via the keypad or through a suitable RS232, RS485 & USB communications port to enable a laptop to be linked into the system on site.

The Remco system provides facilities for displaying data graphically or as customized reports.

Data may also be retrieved in a file format suitable for export to a spreadsheet program should the need arise for further analysis.

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Network Communications Controllers

The **Remco** UC32.16 and UC32.net base units are the basic building blocks of the **Remco** monitoring and control system. The base units are small and modular and may be operated as a compact stand-alone monitoring and control solution or linked together to form extensive networks.

The **Remco** network communications controller (UC32.net) links together up to 63 No. modular data acquisition and control base units to form a sub-network. In turn up to 255 No. sub-networks (UC32.net's) may be networked together using an ultra fast Ethernet communications network.

The **Remco** system is flexible and powerful to monitor and control a wide range of applications from the smallest installation up to largest controlling over 257,000 sensors/devices in a single ultra fast network. The network may be connected via an industry standard modem to enable full remote monitoring and control capability from an IBM compatible office based supervisory desktop or laptop personal computer (PC).

The **Remco** system uses an extremely fast communications network, Ethernet, a computer industry standard. Ethernet enables the network of UC32.net's to deal with ultra fast data transmission rates (2.5 megabits per second) which provides the **Remco** system with the highest levels of interactive control and monitoring capabilities.

TECHNICAL SPECIFICATION

ELECTRICAL

Supply Requirements	24 V AC +/- 20% 50/60 Hz
Transformer Rating	with UCKRA420: 15 VA without UCKRA420: 10 VA
Power Rating	5 Watts maximum
Fuse Rating	1 A resettable

PROCESSOR

Type	Netsilicon NET+50 32bit ARM 7
Clock Speed	44 MHz
Operating System ROM	2 MBytes Flash memory
Operating System RAM	16 MBytes SDRAM
Web Page Memory	8Mbytes Flash memory
Non-Volatile Memory	512 Kbytes battery-backed static RAM
Real-Time Clock	Battery backed for 2 years minimum

INTERFACE

Software	Unitron Command Centre Unitron Engineering Centre Unitron Palm program WebLink
Internal Keypad	LCD 4 x 20 characters, 6 Buttons. Compatible with UCKRA420
External Keypad	UCKRA420 Serial Text Keypad connected via RJ12 port (Maximum cable length 50m)

SOFTWARE FEATURES

Keypad Configuration Mode	Accessible via Internal or External Keypad.
Embedded Web Configuration Interface	UC32.netK configuration parameters can be accessed through embedded web pages, including: <ul style="list-style-type: none"> ▪ Fieldbus Setup and Map ▪ Unet status and setup ▪ Globals ▪ Alarm, Printer and Modem Strings ▪ Port configurations ▪ System statistics These pages are viewable in most browsers, including IE6, Mozilla Firefox, PalmOS5 browser and Pocket Internet Explorer.
Embedded Web Server	can serve dynamic web pages, created in Unitron engineering Centre, to (UC32.netK/WEB and UC32.net/LC/WEB only) view and change points, datalogs and alarms on the local Fieldbus.

Remco Systems Limited
Unit 7 Great Barr Business Park
Baltimore Road
Great Barr
Birmingham B42 1DY
Tel: +44 (0) 121 358 0007 Fax: +44 (0) 121 358 8128
Email: phil@remcosystems.co.uk Web: www.remcosystems.co.uk

Information Sheets:

1. Remco Overview
2. Intelligent Data Acquisition
3. **Networked Solutions**
4. Cathodic Protection Monitoring & Control
5. Corrosion Monitoring

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