Unitron GSM Modem

model options:	Unitron GSM Modem - UC32.NET	Unitron GSM Modem - UC32

The **Unitron GSM modem** allows users to communicate with and engineer the full range of UnitronUC32 Field and Communications controllers via a GSM Telephone Network. Powered from 24VAC and DIN-rail mountable, this unit offers the user an easy method of remotely accessing Cylon sites. The antenna and the controller interface cable are included with every Unitron GSM modem sold by Cylon

Serial GSM Modem solution

Dual Band 900/1800MHz GSM (GSM only, **not** GPRS)
GSM Class 1 and Class 2
RS-232 Serial interface
Serial interface Baud Rates from 2400 to 9600
Telecom approved in more than 50 countries
GSM SIM card required with Circuit-Switched Data number (modem-type connection)

Standard Power Supply and Mounting

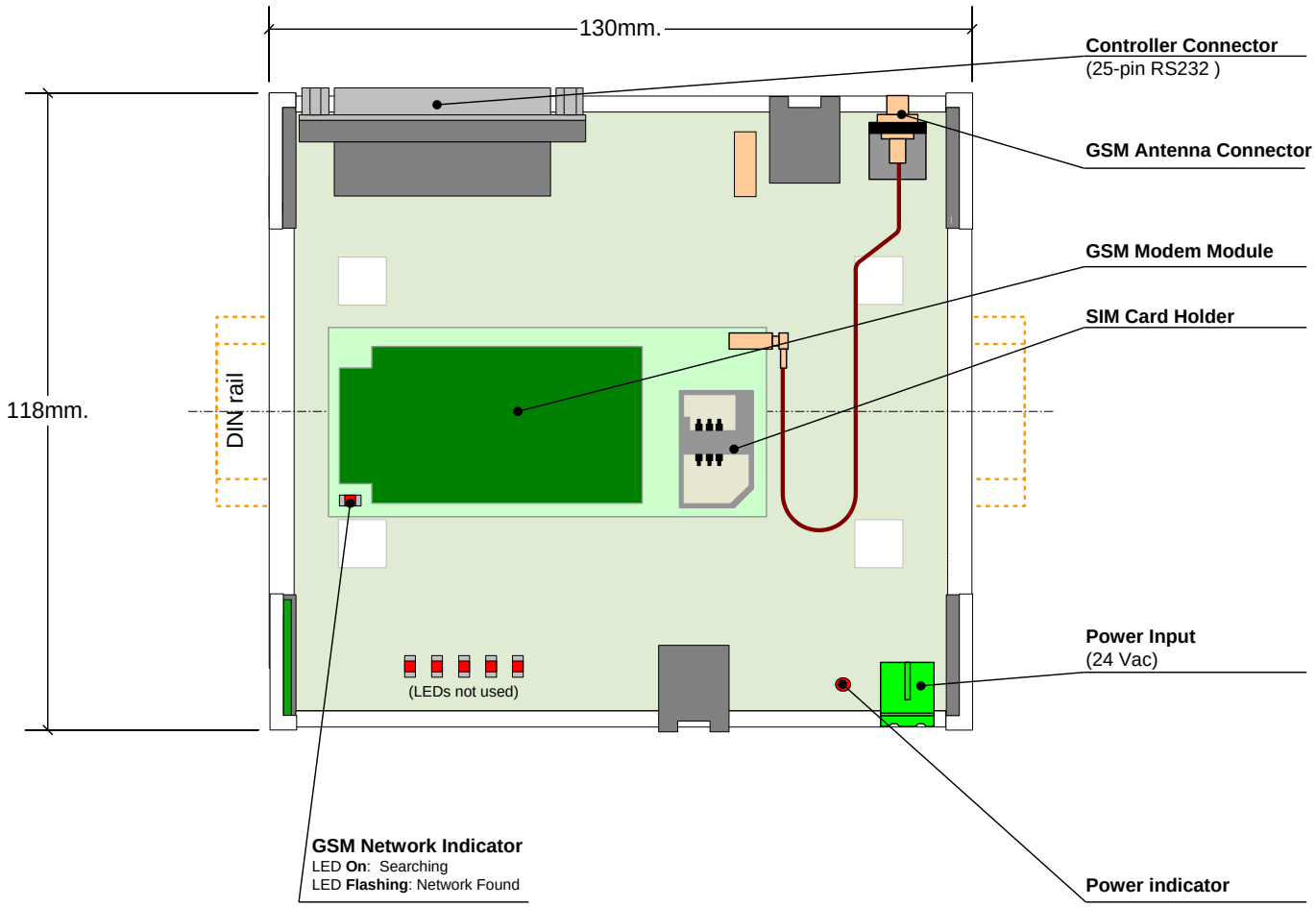
Din Rail Mountable
Powered from 24VAC
Low Power consumption
Interface Cable to controller included
Magnetic Antenna included

Simple Configuration

Automatic remote alarm reporting to supervisor PC configurable from UnitronUC32 Software
Designed to interface with all UnitronUC32 controllers
“Plug & Play” operation with all UnitronUC32 controllers

Cylon CONTROLS

DATASHEET



Installing the Antenna

Attach the GSM antenna by screwing the SMA male connector at the end of the antenna lead onto the SMA female connector on the top right hand side of the modem.

Note: Antenna must not be mounted inside any metal enclosure

Installing the SIM Card

1. Disconnect the Unitron GSM modem from 24VAC and remove the top cover from the modem.
2. Install the SIM Card into the SIM card holder.

WARNING: the SIM card must be 'Circuit-Switched Data' enabled ("modem-type connection"). This will probably use a different phone number to the GSM voice number. Confirm with your telecoms provider that the SIM is **not** data-enabled for GPRS only (this is the default for most telecoms providers)

3. Power up the Unitron GSM modem and observe the Network found LED on the modem module

LED ON => Searching for GSM Network
LED FLASHING :
once per 5 seconds => GSM Network found
once per second => Call in progress

The Network Found LED should begin to Flash after approximately 30 seconds.

UK Patent GB 2 400 991
Irish Patent 84413

Specifications:

MECHANICAL

Size (excluding terminal plugs)	145 x 130 x 45 mm (5.7 x 5.12 x 1.78")
Enclosure	Injection moulded ABS
Mounting	DIN rail

ENVIRONMENT

***Note**: This equipment is intended for field installation within another enclosure.*

Ambient Temperature	0° to +70°C (32°-158°F) ambient.
Ambient Humidity	0% to 90% RH (non-condensing)

WIRING

***Note**: Use Copper or Copper Clad Aluminium conductors only.*

Conductor Area	Max: AWG 12 (3.09 mm^2) Min: AWG 22 (0.355 mm^2)

ELECTRICAL

Supply Requirements	24 V AC +/- 10% 50/60 Hz or 24VDC
Transformer Rating	up to 10 VA
Fuse Rating	0.9 A 30 V Resetable fuse
Power Consumption	Typical: 300ma Maximum: 1.3A

COMMUNICATIONS

Local RS232 TTL port	@ 9600, 7600, 4800 and 2400 Baud Rates Max cable length 4m

CABLING

1S9CS165 : DB-25 to UC32.netK Communications Controller cable *(Unitron GSM Modem - UC32.netK only)*
1S9CS160 : DB-25 to UC32 Field Controller cable *(Unitron GSM Modem - UC32 only)*

INTERFACE

Software	CCDial Unitron Command Centre **v6.40 or later** Unitron Engineering Centre **v6.40 or later**	
AT Command summary:	ModemType	Unitron GSM Modem
	InitialisationString	~~~+++~~~ AT&F0E0@ATS0=1@AT+CICB=0@AT+IPR=9600@AT&W@
	DialOutInitialisationString	ATDT
	ConnectString	CONNECT
	HangupString	~~~+++~~~ATH@

APPROVALS

Safety Certifications	UL 60950 cUL60950 EN 60950
Network Certification	PTCRB
EMC Approvals	FCC part 2,15,22,24 EN 55022 EN 55024
Modem Approvals	The modem contains an OEM module which is approved for use in over 50 countries worldwide. For the current list of approved countries please contact Cylon Technical Support.

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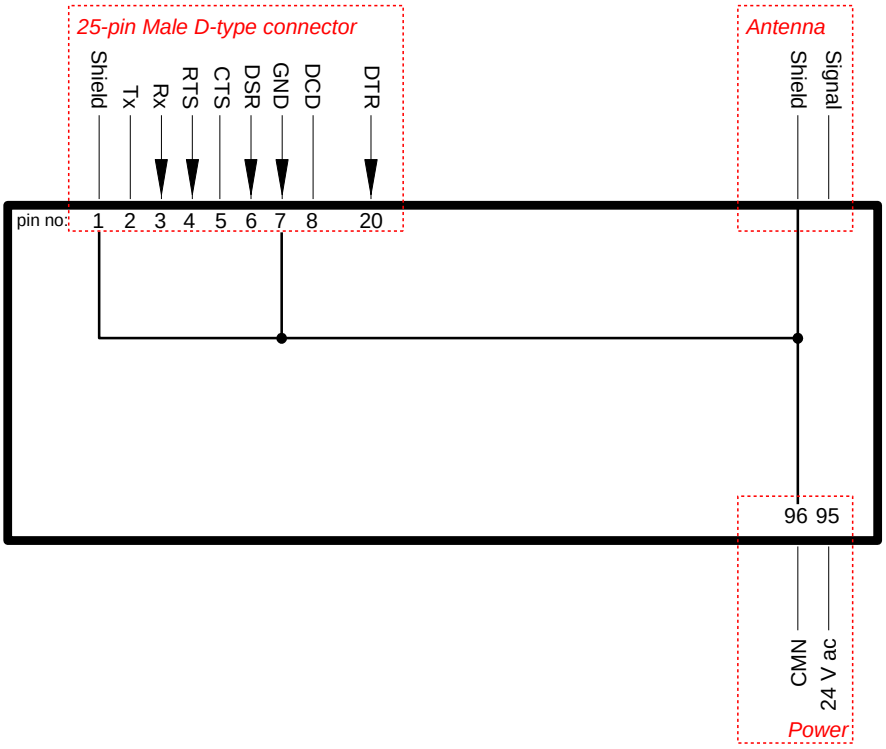
WIRING



ABOUT UNITRONUC32

Unitron PSTN Modem is part of the **UnitronUC32** range of products, which offers the following benefits:

Unique Flexibility with UniPut™ I/O

The UnitronUC32 range uniquely presents UniPut I/O, a revolutionary answer to flexible point configuration, offering maximized utilisation of controller capacity along with flexibility in strategy changes. Built on a modern, web-based architecture, the UnitronUC32 range has a wide application scope with the flexibility of being stand-alone or network enabled. Easily customisable, the UnitronUC32 range has optional internal or external keypads for a powerful yet user-friendly interface, matched by extensive monitoring and logging capabilities.

The right integration at the right level

Cylon provides easy integration between disparate building automation components utilising BACnet. The implementation leverages the flexibility and high performance of the Cylon fieldbus, and yet exposes all controllers as BACnet devices. The value to owners and specifiers of the BACnet suite of standards is at the Management and Automation Layers. TCP/IP is now pervasive and integration at this level removes the dependency on physical networks which evolve over time. Importantly, the BACnet routing is part of the Cylon communications controller and no separate PC gateway is required. This provides a highly robust yet low cost solution.

Cost Effective, low entry point for building control.

The UnitronUC32 range offers reduced costs in terms of training, implementation, rollout and maintenance. Modular, extendible packages along with low installation costs mean a low entry point for building control. Advanced web based technology provides expanded facilities for maintenance personnel, while day to day access is offered via intuitive web pages. The future proof UnitronUC32 range provides forward & backward compatibility, meaning an effortless upgrade path for existing Unitron Systems.

Highly programmable and extendable through web enabled HVAC technology

The UnitronUC32 range offers an advanced, web based, 32-bit architecture, with advanced programmability through the UnitronUC32 Engineering Centre. Inbuilt diagnostics along with expanded data logging and strategy storage is further enhanced by UniPut I/O, offering up to 8 Universal inputs, up to 8 UniPut connections (AI/DI/AO/DO) and up to 8 UniPut I/O with relays.

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