



Messenger Series
Reliable SCADA Communications

Product Data Sheet

New!

Messenger Cellular Data Modem

Add low-cost cellular communications to ICL programmable SCADA controllers

- Low-cost reliable SCADA communications over cellular networks
- Add cellular communications to ICL programmable SCADA controllers
- Supports ICLs new SMS HMI. Alarming and data transfer capabilities at extremely low cost
- Models available for GSM/GPRS (AT&T/T-Mobile) and CDMA (Verizon/Sprint)
- RS-232 and USB Communications Interfaces
- 10Vdc to 30Vdc DC power, or powered from the USB connector
- Compact DIN Rail Mounting
- Wide operating Temperature Range: -40°C to +70°C
- 3-year factory warranty on parts and labor



Cellular Data Modem

Reliable Low-cost Communications – The Messenger Cellular Data Modem provides reliable data communications over standard cellular networks. Cellular plans costing less than \$10 per month are available, making the use of these modems and cellular technology a viable low-cost alternate to private radio networks or telephone lines. Using cellular technology eliminates the capital costs of setting up a private radio network.

Text Messaging Support – When used with ICL programmable SCADA controllers, Messenger Cellular Data Modems can be used to exchange text messages for SCADA communications with other ICL controllers and smart I/O modules such as Sprite, Solaras and Ascent devices, as well as user cell phones.

ICL programmable SCADA Controllers and I/O also support text messaging for user HMI and alarming applications. Now it's possible to use low cost Text Messaging for secure protected process variable and setpoint access, receiving alarm notifications, and performing low cost data exchanges with other RTUS and SCADA controllers.

Text messaging eliminates the downsides of trying to set up IP based cellular connections with their dynamic IP address, firewalls and expensive “per megabyte” data plans.

Easy Installation – For GSM/GPRS networks such as AT&T and T-Mobile, the modem is easily added to the system by installing a SIM card from the cellular carrier. The Messenger Cellular Data Modem automatically learns the required registration information and logs on each time that it's powered on. For CDMA networks such as Verizon and Sprint, the carrier registers the modem when service is activated. From that point on, the cell modem logs on whenever it is powered on.

USB and RS-232 Interfaces – Messenger Cellular Data Modems provide both USB and RS-232 interfaces, allowing them to be used with modern controllers and computers, as well as legacy equipment. The USB interface can automatically power the modem, simplifying installation and battery backup support.

Automatic Time Synchronization – Messenger Cellular Data Modems automatically update the SCADA controllers Real Time Clock from the cellular network, especially important for data logging and trending applications. When linked to a cellular network, the controller never needs to be manually updated to correct for long-term drift.

Industrial Rated - Messenger Cellular Data Modems constantly monitor the signal strength between them and the nearest cellular tower, providing useful feedback for antenna installation and long-term link reliability monitoring and signal strength readings in a controller register. Site specific carrier choices are simplified and accelerated.

Industrial Rated - Messenger Cellular Data Modems are designed for use in a variety of industrial and harsh environments. They are DIN rail mounted, powered from 12Vdc or 24Vdc, have conformal coated circuitry and support a very wide operating temperature range.

Rugged Reliability – Messenger Cellular Data Modems are 100% tested over an extended temperature range of -40°C to 70°C, and backed by an industry leading 3-year factory parts and labor warranty.

Specifications

GSM/GPRS Models

Common Cell Carriers	AT&T and T-Mobile
Technology	GPRS Class 10 Quad-band GSM 850/900/1800/1900 MHz
Speed	Packet data up to 85.6Kbps Circuit-switched data up to 14,400 bps transparent and non-transparent
Error Handling	MNP 2 error correction, V.42bis compression

CDMA Models

Common Cell Carriers	Verizon and Sprint
Technology	CDMA2000 1xRTT Dual-band 800/1900 MHz CDMA
Speed	Packet data up to 153.6Kbps Circuit-switched data up to 14,400 bps

Data Communications

Interfaces	RS-232 and USB 2.0 compatible
Serial Data Rate	Up to 115Kb, auto baud rate detection

Certifications (partial list)

EMC: FCC Part 15 Class B, 22, 24; IC: RSS 129, 132, 133; EN 55022
 Safety: cUL 60950-1, EN 60950-1, UL 60950-1
 Network: CDG 1 & 2
 RoHS Compliant

Isolation	3000Vrms (from comm. ports and DC power to telephone line)
Power Terminal Blocks	3.5mm (0.138"), removable, 12 to 22AWG, 15A/contact maximum
Antenna Connector	SMA
RS-232 Connector	RJ-45
USB Connector	Type A Mini-USB
Mounting	35mm. DIN rail
Dimensions	1.4"W x 3.7"H x 3.8"D (includes terminal block and elevation off panel on DIN rail)
Environment	- 40°F(- 40°C) to 158°F (70°C), 10%RH to 95% RH, non-condensing
Power	10 to 30Vdc, <0.1W in Sleep Mode, 0< 1.0 W,active
Warranty	3 years, factory parts and labor

Order Part Numbers

98-1451	Messenger GSM/GPRS AT&T/T-Mobile (sms/text message), SMA connector
98-1452	Messenger CDMA Sprint (sms/text message), SMA connector
98-1453	Messenger CDMA Verizon (sms/text message), SMA connector

Represented by:

Industrial Control Links, Inc.
www.iclinks.com
 Tel: 530-888-1800