![Wired&Wireless Solutions International logo]

PACCS Link RFI595F
Intelligent UHF Radio Modem

The RFI 595F is a high-speed radio modem capable of functioning in hostile RF environments with data throughput of 9600 bps. Intelligent integrated software allows many different data configurations, including store and forward repeater operation and intelligent protocol routing for large SCADA systems.

Features

- ➢ *Economical*
- ➢ *Built in path testing*
- ➢ *In built in diagnostics*
- ➢ *Front panel indicators*
- ➢ *Up to 50 km in one hop*
- ➢ *Forward error correction*
- ➢ *Can be commissioned without test equipment*

Applications

Point to Multipoint Acquisition and Control
Intelligent built in Modem can interface with virtually any standard Data logger, PLC, computer; i.e. any RS232 device. In built buffers handshake with input/output devices at data speeds up to 38400 bps and transparently move data to the other end.

Linking of Local and Remote RS232 Ports
The built in TXCO provides +/-1ppm stability as standard with the provision for an external input when a higher stability is required.

Special Functions
Software options include store and forward repeater function, which permits remote hilltop repeater applications. There is no progressive degradation of Signal to Noise Ratio as the repeater function brings the signal back to digital base band. Also, the radio modem supports many industry standard communications protocols with routing tables and packet timers. For more information on protocol support contact the Wired & Wireless Solutions International.

SPECIFICATIONS
MODEL RFI 148-100 DTX

Physical

Dimensions	19" Rack mount, 4RU high, 395 mm deep
Weight	18kg
Construction	Welded and passivated m/steel, aluminium front panel with integrated Display

General

Operating voltage	AC: 85-132VAC or 170-264VAC auto select. 47 - 400Hz DC: +24VDC +/-1V @ 12 A

Operating current
    Standby mode
     Transmit mode
	
	400mA (24VDC) (nominal)
	12A (100W, 24VDC) (nominal)
	11.5A (75W, 24VDC) (nominal)
	7.8A (50W, 24VDC) (nominal)
	5.1A (25W, 24VDC) (nominal)

Operating temperature range	-10 to +60oC
Operating humidity range	Up to 95% non-condensing relative humidity @ 50oC
Approvals	AS/NZS 4769.1 : 2000, AS-4295 : 1995

Transmitter

Output power	25W to 100W, software selectable (100%duty cycle)
Switching range	138 - 174MHz (25kHz channels), up to 16 channels
Frequency raster	10kHz, 12.5kHz
Carrier stabilisation	50ms (max)
Frequency stability	1ppm standard (External input if required)
Spurious emissions	< -80 dBc / -30dBm (max)
Adjacent channel performance	< -70 dBc / -22dBm (max)
Output protection	Transmitter fully protected for any load @ full power @ 60oC

Data System

Modulation	Protocols supported: POCSAG: 512 / 1200 / 2400bps (2-FSK) ERMES: 6250bps (4-FSK) FLEX: 1600 / 3200 / 6400bps (2-FSK/4-FSK) Direct Digital Synthesis (DSP implementation): Modulation rise/fall-time as per recommendations Asynchronous POCSAG data interface Synchronous ERMES/FLEX data interface
Simulcast support	Frequency reference: Internal (TCXO) / external (GPS), with automatic switch-over Carrier offset: Up to 3000 Hz (1 Hz steps) Absolute delay: 0-40ms (5us steps)
Diagnostics	Windows™ management application: Local configuration and diagnostics Automatic remote alarm / status reporting over dial-up link Central remote monitoring via dial-up link