

PTC-IInet

The Network PACTOR®-Controller

The automatic HF-Internet Gateway for your PACTOR®-IP-Bridge Network



The PTC-Ilnet

PACTOR® Modem with build-in Linux Webserver



The PTC-IInet is a clever combination of a PACTOR® modem and an embedded Linux-computer. With this, it represents a complete base-station with Internet-Gateway for a PACTOR®-IP-Bridge network. Just connect the PTC-IInet to an existing router and configure it using its web-interface.

The Modem Part

- One single connector to the HF/VHF transceiver for all modes.
- Transceiver control for ICOM, YAESU, SGC, KENWOOD and Rohde&Schwarz, including RS232 for modern transceivers.
- Packet-Radio with 300, R600, 1200, 9600 and 19200 baud with built-in DSP.
- With two high performance processors from Freescale, the PTC-Ilnet achieves outstanding flexibility.
- Sophisticated signal processing and analyzing, maintains a stable HF link even during difficult propagation conditions.
- Temperature compensated crystal oscillator.
- Tuning bar display with 15 dual color LED lamps.
- 2 MB of static RAM.
- Electronic (silicon) serial number.
- Noise free HF reception by use of HF suitable construction, 6 layer multilayer board and filtering of all inputs and outputs.
- · Compact SMD assembly.
- Flash-ROM for easy firmware updates.
- Dimensions: 172 W x 43 H x 205 D mm, 1.69 H x 6.77 W x 8.07 D inches.
- Weight: 740 g.
- Power Supply: +10 to +20 V DC, 300 mA max.
 Reverse polarity protected. Fuse selfresetting.

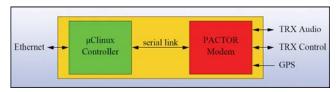
The Linux Part

- Embedded Linux module DNP/5282.
- 64 MHz ColdFire prozessor MCF5282.
- 16 MB RAM, 8 MB Flash.
- 10/100 MBit Ethernet.
- μClinux with Kernel 2.4.27.
- Comfortable web-interface for configuration and control.
- Update of µClinux, web-interface and the modem firmware easily over the Internet.
- Complete (Linux) source available!

PACTOR®-II

- Max. 1200 Bit/s, incl. data compression.
- Automatic adaption to the channel quality in 4 speed levels.
- · Bandwidth 500 Hz.
- Use of the most modern transfer mode technics: convolutional coding, Viterbi-decoder, soft-decision and Memory ARQ allows error free data transfers even with inaudible signals.

- Automatic frequency correction of ± 80 Hz.
- Automatic adaption of the radio's transmit power to the channel quality is possible.



PACTOR®-III*

Like PACTOR®-II, but:

- max. 5200 Bit/s, incl. data compression.
- Automatic adaption to the channel quality in 6 speed levels.
- Bandwidth 2400 Hz.



GLN SP Stations

Profile of a PACTOR user:

Also the German coast-station KielRadio uses the PACTOR® IP-Bridge (PIB) to provide reliable and inexpensive data communication for commercial maritime applications. The principle is now easily available to everybody with using the PTC-Ilnet. Together with other coast stations KielRadio is member of the "Global-Link-Network" (GLN), which operates PIB and PACTOR®-III.

Includes installation manual, CD-ROM, cables and power plug.



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How the PIB works

PACTOR' II/III

Client

e.g. Vessel, Bush Hospital, Polar Station, Mission, **HAM Station**

The PIB (PACTOR®-IP-BRIDGE) is a development of SCS Germany

Host

Private/Commercial Provider e.g. Kielradio



PTC-IIusb (or any other PTC Modell) 50% Data, 50% TCP/IP Overhead Connected to the Client's-PC **Standard Windows Network** Outlook, Netscape... Installed like a phone modem



HF/VHF

Wireless Long Distance Connection with Standard Radio & Antenna Systems



PTC-Ilnet 50% Data, 50% TCP/IP Overhead Directly connected to the router Linux PC and LAN connector Web-browser configurated **Remote TRX control** Remote upgradable



User E-Mail, Low Speed TCP/IP Provider 1

Permanent Internet Connection