

# PTC-IIIusb

[www.scs-ptc.com](http://www.scs-ptc.com)

## PACTOR-III Proved, Robust, Global

Through extensive circuit optimization and extremely dense component placing, we could develop a compact but still very high performance multimode controller: **the PTC-IIIusb**. As successor to the beloved PTCIIusb it is mainly designed for **PACTOR-III**, thus allowing worldwide E-mail traffic via shortwave. It is however also very suitable for all other available modes through its superb performance - e.g. with Packet Radio, RTTY, weather FAX reception or decoding CW.

**The PTC-IIIusb** is software compatible to the PTC-IIusb so that existing software (AirMail, RMS Express, Alpha etc.) can continue to be used. The elegant design as well as the possibility of easy upgrades (free updates!) round out the concept of the most modern **PACTOR-III** modem from **SCS**.



### Small but Oh wow!

The **PTC-IIIusb** is not only an excellent HF-modem but also a powerful multi-mode controller. It supports the following modes: PACTOR-I/II/III, PR, (also RPR), RTTY, CW, PSK31, FAX, SSTV, AMTOR, NAVTEX, APRS-Beacon.

### Transceiver control

You can remote control your transceiver directly from the PTC-IIIusb for really comfortable operation. The **PTC-IIIusb** TRX interface is compatible with equipment from Icom, Yaesu, SGC, Kenwood as well as Rohde and Schwarz.

### Bluetooth compatible?

You wish to minimize the potential for mutual HF interference or ground loops and dispense with the USB connection? No problem. You can operate the **PTC-IIIusb** via the optional Bluetooth module!

### PACTOR-III as standard

- Widespread proven technique (Winlink, SailMail etc.)
- Max. 5200 bps net
- High Adaptivity
- High Interference Immunity
- Max 2400 Bandwidth
- Automatic Frequency Correction



## Technical data

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Operational Modes	
<b>PACTOR-I,II,III:</b>	With PACTOR-III maximum approx. 2700 bps without compression, approx. 5200 bps with PMC-Text compression, 6 "Speedlevels" with automatic adjustment for the actual channel quality, Bandwidth max 2400 Hz, k=9 – convolutional code, Viterbi decoder with soft decision and complex "Memory-ARQ", through which practically inaudible signals can still be decoded. Automatic frequency correction ( $\pm 80$ Hz), automatic transmitter power adjustment is possible.
<b>Packet-Radio:</b>	300, 1200 Bd (A)FSK, 9600, 19200 Bd G3RUH-Direct-FSK, R300/600 Bd Robust-Packet-Radio (RPR), automatic APRS-Beacon
<b>FAX/SSTV:</b>	All usual analogue Modes, including AM-Fax, special JVCOMM32-Mode, very good AirMail/GetFax-support for Weather-Fax
<b>RTTY:</b>	20 – 300 Bd, very good receiving decoder
<b>PSK31:</b>	DBPSK und DQPSK, 31,25 Bd
<b>CW:</b>	Decoder with automatic speed adjustment, CW-transmit-terminal
<b>AMTOR/NAVTEX:</b>	ITU-R M.476-compatible Implementation, NAVTEX-Processor for automatic message storage.

Hardware	
<b>Processors:</b>	Freescale MC68360 32 Bit CPU with 25 MHz clocked, 56303 48 Bit DSP with 100 MHz clocked, 768 kB fast DSP RAM, 2 MB CMOS RAM, 256 kB Flash-ROM for the firmware (Easy updates), common TCXO-time base with 1 ppm accuracy
<b>Connections:</b>	USB (opt. Bluetooth), GPS (RS232 and TTL), Transceiver-Audio/PTT (a common connection for all operational modes), Transceiver remote control (Transceiver types: Icom, Yaesu, Kenwood, SGC, Rohde & Schwarz)
<b>Audio-level/impedances:</b>	Input: max. 2 V p-p, 47 k $\Omega$ , Output: max. 3 V p-p, 1 k $\Omega$
<b>Display:</b>	9 LED's for the display of hardware and operational condition
<b>Power supply:</b>	10...20 V, 300 mA (max. at 13,8 V input voltage)
<b>Weight/size:</b>	450 g, 125 x 43 x 138 mm (Width x Height x Depth)

