

Declaration of Conformity

NovaTec Kommunikationstechnik GmbH hereby declares that the **PT-System (PT-US, PT-SU)** conforms with the CE requirements.

Norm/Standard	tested
<ul style="list-style-type: none"> • EN 55022 Class B • EN 50082-1, EN 50081-1, consisting of IEC 801-2 to 4 	<ul style="list-style-type: none"> • at the FZA, Burgsteinfurt on December 19, 1995 • at the FZA, Burgsteinfurt on April 10, 1996



We change the shape of the world

Technologiepark 9, D-33100 Paderborn, Tel. +49-5251/1589-0, Fax: +49-5251/1589-611, hereby declares that the **PT** is not intended for connection to a public telecommunications network. Connection of this equipment to a public telecommunications network in the Community Member States is in violation of the national laws implementing Council Directive 91/263/EEC on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity and Council Directive 93/97/EEC supplementing Directive 91/263/EEC in respect of satellite earth station equipment.

Paderborn, September 16, 1996

Please note:

- Before installing the **PT**, make sure that all further devices to be connected to the **PT** system provide galvanic separation from other telecommunications devices or lines and the main supply (230V_~)!
- If outdoor cabling or line is connected to the **PT**, gas discharge protection elements are required and have to be installed at the outer terminating point.
- Unless a specific registration number for a particular country is given on the label on the back of the **PT**, the **PT** can only be connected to a private subscriber line or a registered PABX system!
- This unit includes a warranty (1 year) on functionality in case of manufacturing failure. This warranty expires in case of wrong installation, transportation, mishandling or opening.

PRIVATE

P T - U_{P0}

TERMINATOR

The **PT** is a transmission system for extending an **S₀**-connection.

This transmission system consists of two units:

- **PT-SUP** (for **S₀/U_{P0}** conversion)
- **PT-UpS** (for **U_{P0}/S₀** conversion)

Operating the PT

The **PT-SUP** passes the voltage of the **S₀**-bus to which it is connected through to its **U_{P0}**-interface via two internal 4K7R resistors. This voltage on the **U_{P0}** interface is always monitored and controlled in the **PT-UpS**. The **PT-UpS** can be switched to standby or active mode by the DC voltage on the **U_{P0}** interface. When there is a voltage of $\geq 40V$ on the **U_{P0}** interface, the **PT-UpS** will automatically be set in the active mode and the power on the **S₀**-bus of the **PT-UpS** will also be switched on. This monitoring function can be switched off by an internal jumper on the mother board.

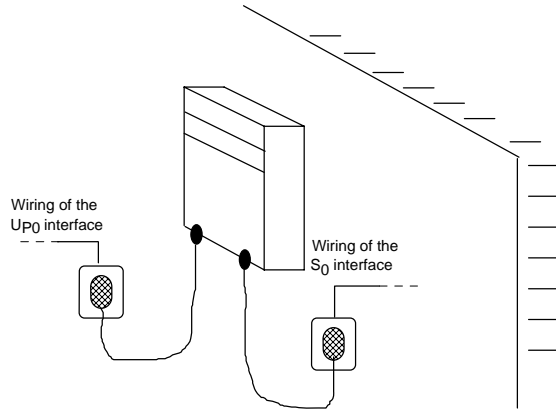
Jumper	Operation	Comments
connected	active	monitoring function activated.
not connected	passive	monitoring function deactivated. Power is always supplied to the PT and the S₀ bus (state of delivery).

A configuration jumper on the **PT-UpS** plug-in card switches the **S₀** interface to point-to-point or bus operation.

Jumper	Operation	Comments
connected	point-to-point	for long distances up to 1000 m
not connected	bus	for the operation of several terminals on one bus. Range max. 550 m depending on bus configuration (state of delivery).

Connecting the PT to the wiring system

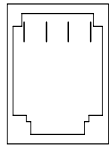
To connect the **PT** to the wiring system flexible cords and fixed wall sockets must always be used (see drawing below).



Connector Pinout

U₀ interface

1.....4

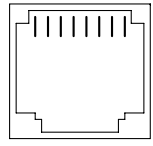


Front view of socket

Pinout (RJ9 4-pin socket)

S₀ interface

1.....8



Front view of socket

Pinout (RJ45 8-pin socket)

PT-US/PT-SU

1 - not connected

2 - a-wire

3 - b-wire

4 - not connected

PT-US

1 - not connected

2 - not connected

3 - Ra*

4 - Ta*

5 - Tb*

6 - Rb*

7 - not connected

8 - not connected

PT-SU

Ta

Ra

Rb

Tb

PT-US

the connectors carry the following potentials:

Ra, Rb: +40 V

Ta, Tb: 0 V

*Ra, Rb, Ta and Tb are terminated each pair with a 100R resistor.

Technical Data

The U_{P0} interface is TCM (time compression multiplex) specified, and the S₀ interface is specified according to I.430.

Mechanical Data:

Dimensions (Depth x Width x Height):

8.8 cm x 6.7 cm x 12.5 cm.

Weight: approx. 0.4 kg.

Storage:

Temperature: 0° - 70° Celsius.

Humidity: 70 % not condensing.

Electrical Data:

Output voltage (TE-Side) with local powering:

42 V₋ without load and 36 V₋ with 80 mA load.

Input voltage for local powering:

230 V_~ ± 10%.

Continuous input current for **PT** UpS/SUp at 230 V_~ in subject to the TE-side:

- without load: 18 mA

- with short circuit on the line: 25 mA

- with overload: 38 mA.

Transmission range of the:

- U_{P0} interface = 0 - 3.5 km depending on cable type;

- S₀ interface = 0 - 1.5 km depending on bus mode and cable type.

Ordering

Name of assembly	Order number
U₀ (2B1Q)	
PT-US	2F3101
PT-SU	2F3201
PT-UU	2F2000
U_{P0}	
PT-UpS	2F3401
PT-SUp	2F3501
U_{k0} (4B3T)	
PT-US*	2F3601
PT-SU*	2F3701
PT-UU (Repeater)	2F2011
Further Versions	on request
Connecting cords	
(U ₀ interface)	2F4011
(S ₀ interface)	2F4009

* in preparation

Options:

01	only with local powering
02	with local and remote power supply
03	without remote power supply but with looping of the U ₀ -voltage to the S ₀ -side (on Pin 1 and 8 of the RJ45 socket)
04	disconnection of the S ₀ -voltage and/or the operating voltage of the PT -UpS on the availability of the S ₀ -voltage on the PT -SUp-side
05	with conversion from U _{k0} - to U ₀ -interface (only for 2F2011)
06	with conversion from U ₀ - to U _{k0} -interface (only for 2F2000)
07	powering (battery backup) with 12 V ₋ local without powering on S ₀ -interface
08	With bypassing of the voltage of the S ₀ -interface to the U ₀ -interface