

## General Specifications

### Power supply

Rated ranges of use for a.c. line voltage, -12 % to +10 %, switch-selectable . . . . . 110/117/127/220/ 227/237 V  
 BN 984/05 and BN 984/55 . . . only 100/110/117/200/210/217 V  
 Rated range of use of a.c. line frequency . . . . . 47.5 to 63 Hz  
 Power consumption . . . . . approx. 150 VA  
 Safety class to IEC 348 and VDE 0411 . . . . . Class I

### Ambient temperature

Rated range of use . . . . . +5 to +40 °C  
 Storage and transportation . . . . . -40 to +70 °C

### Dimensions

Bench-top instrument (w x h x d in mm) . . . . . 477 x 244 x 425

Weight . . . . . approx. 25 kg

## Ordering information

### PCM Channel Measuring Set PCM-4

2048 kbit/s version, menu in English  
 1544 kbit/s version, menu in English,  
 WECO connectors  
 2048 kbit/s version, menu in German  
 1544 kbit/s version, menu in English,  
 I 214 APS connectors  
 2048 kbit/s version, menu in Spanish

**BN 984/01**

Software retrofitted to the latest status for

PCM-4 BN 984/01

BN 984/00.41

PCM-4 BN 984/02 and BN 984/05

BN 984/00.42

**BN 984/02**

PCM-4 BN 984/03

BN 984/00.43

**BN 984/03**

Specify actual software version and serial no. when ordering.

**BN 984/05**

User specified modifications

A detailed specification sheet is available for entering the values required.

**BN 984/06**

Analog generator/receiver impedance modifications

BN 984/00.31

(replaces 850 Ω/900 Ω and CPLX<sup>2)</sup>)

Analog generator output impedance modified to Z<sub>out</sub> ≈ 0 Ω in place of complex impedance

BN 984/00.34

Impedance modification

(replaces 850 Ω or 900 Ω and CPLX<sup>2)</sup>)

BN 984/00.32

2 wire termination modification

(replaces 910 Ω || 39 nF)

BN 984/00.33

(selected with PARAM 914, D-D mode)

Tolerance masks programmed

to user specifications

BN 984/00.35

Instruments are equipped with ITU-T tolerance masks as standard.

Forms for entering tolerance mask changes are included in Appendix D of the operating manual.

### PCM Channel Measuring Set PCM-5

2048 kbit/s version, menu in English  
 1544 kbit/s version, menu in English,  
 WECO connectors  
 2048 kbit/s version, menu in German  
 1544 kbit/s version, menu in English,  
 I 214 APS connectors

**BN 984/52**

**BN 984/53**

**BN 984/55**

### Options

#### Interfaces:

Codirectional 64 kbit/s input

BN 984/00.01

Codirectional 64 kbit/s output

BN 984/00.02

Electrical characteristics to ITU-T G.703

Contradirectional 64 kbit/s input

BN 984/00.03

Contradirektionaler 64 kbit/s output

BN 984/00.04

Electrical characteristics to ITU-T G.703

Serial 64 kbit/s TTL input

BN 984.00.05

Serial 64 kbit/s TTL output

BN 984.00.06

Co- or contradirectional, depending on mode

Parallel 64 kbit/s TTL input

BN 984.00.07

Parallel 64 kbit/s TTL output

BN 984.00.08

Parallel 8 bit input/output with 8 kHz clock signal

64 kbit/s V.11 interface

BN 984/00.09

input/output via 15 way plug to ITU-T X.24

Analog signalling interface

BN 984/00.19

for measurement of signalling distortion and interference from signalling

IEEE 488/IEC 625 Interface

**BN 958/24**

with IEEE 488 connector and K 420 connecting cable

#### Bridges:

Return Loss and Longitudinal Conversion

Transfer Loss Bridge<sup>1)</sup>

600 Ω/900 Ω/CPLX<sup>2)</sup> (PCM-4 only)

**BN 984/00.10**

600 Ω/850 Ω/CPLX<sup>2)</sup> (PCM-4 only)

BN 984/00.11

Impedance modification

(replaces 850 Ω or 900 Ω and CPLX<sup>2)</sup>)

BN 984/00.32

Bridge impedance addition

BN 984/00.16

Up to 4 additional customer specific CPLX impedances can be added to the bridge; selection only via IEC/IEEE interface

120 kHz low pass filter

BN 984/00.14

for out-of-band noise suppression

#### Accessories

LabWindow<sup>®</sup> Driver (for PCM-4/5 and MU-30)

BN 984/95.99

for integration in automatic test systems for development, production and service/calibration

Test Point Scanner MU-30

BN 823/11

with < IEC 625 > Interface Card

Balanced through-switching of 10, 24 or 30 V<sub>F</sub> channels in TX and RX directions

WG PenBERT mini PCM monitor (E1)

BN 4555/11

(see WG PenBERT data sheet for details)

D.C. Loop Holding Circuit GH-1

BN 984/00.12

with capacitor-coupled output

1.5 m connecting cable

K 348

CF (male) to WECO 310 (ADC jack)

1.0 m connecting cable

K 438

CF (male) to I 214 APS (male)

D.C. Decoupling for analog inputs and outputs, PCMZ-4

BN 984/00.13

for use with BN 984/01, BN 984/51, BN 984/03 and BN 984/53 only. (Not required if GH-1 is used).

IEEE 488/ < IEC 625 > Adapter (m-m)

S 832

for < IEC 625 > interface card

Front and Back Panel Covers SD-5 (1 set)

BN 700/00.25

19" conversion kit

BN 700/00.05

\* Equipped with the Versacon 9 75 Ω basic connector and BNC adaptor. For other adaptor types, see "Specification Sheet Versacon 9", and order chosen type when ordering instrument.

1) Only one bridge can be fitted at any one time.

2) CPLX is fitted as standard; CPLX = 220 Ω in series with 820 Ω || 115 nF