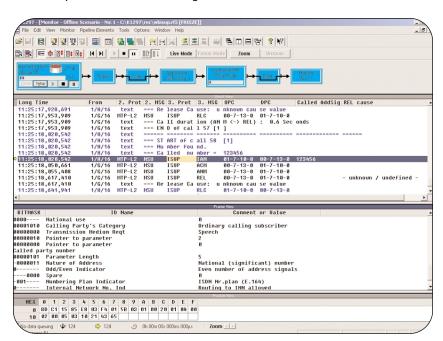
Transport, ISUP and Intelligent Network Software



#### Features & Benefits

Monitoring, Simulation and Emulation of:

- SS#7
- IΡ
- SSCOP/SSCF
- MTB3b
- ISUP/TUP
- IN

Emulation of SSP and SCP

## Applications

Signaling Test of Transport Layers (Narrowband, Packet Data, Broadband)

Signaling Test of ISUP/TUP Components

Signaling Test of Intelligent Network Components

Transport software packages are the basis for most of other application software for K1297/K1205 Protocol Testers. These products provide monitoring/simulation/emulation capabilities for transport protocol layers, i.e. OSI layer 2 and layer 3. Depending on the upper layer protocols, appropriate transport packages need to be ordered.

ISUP software packages extend the broad basis of protocol software for K1297/K1205 Protocol Testers. ISUP Protocol Packages run together with all Transport Protocol Packages (SS#7, IP, ATM). Because of this, the customer can test signaling of ISUP Components (e.g. IN interworking or interoperability tests).

Tektronix offers a complete range of monitoring applications for IN Protocols for Protocol Testers K1205 and K1297-G20 and in addition simulation/emulation capability of IN protocols on K1297-G20. MBS provides the possibility to change parameters for simulation and to emulate network elements SSP and SCP. IN Protocol Packages run together with all Transport Protocol Packages (SS#7, IP, ATM). Because of this, the customer can test signaling of IN Components in Mobile and Fixed Networks in active and passive mode.



► Transport, ISUP and Intelligent Network Software

#### MONITORING FEATURES

- ► Decoding of Transport Protocols and Decoding of ISUP/TUP Protocols
- ► Call Detail Records (CDR)
- ► Call Statistics
- ► Free Programmable Counters
- ▶ Call Trace
- ► Busy Hour Call Attempt (BHCA) Measurements
- ► Decoding of IN Protocols
  - IN Call Trace

#### SIMULATION/EMULATION FEATURES

- ► Simulations and Emulation Capability of SS#7 Protocol Elements
- Simulations and Emulation Capability of ISUP/TUP Protocols
- ► Simulations/Emulation of IN Protocols
- ► IN Call/Transaction Generator
- ► Free Programmable Statistics
- ► SSP Network Element Emulation (acc. ETSI)
- ► SCP Network Element Emulation (acc. ETSI)

## Examples for Protocol Solutions

Test Solution	Ordering Numbers*1
IN over SS#7	7PK12xx-xCJ 7PK12xx-xTC 7PK12xx-xTN
IN over IP	7PK12xx-xCJ 7PK12xx-xTC 7PK12xx-xJS 7PK12xx-xTP
IN over ATM	7PK1221-xCJ 7PK1221-xTC 7PK1221-xTB

<sup>\*1</sup> For x insert relevant code: 05 for K1205, 21 for K1297-G20 application; 6 for monitoring, 7 for simulation/emulation.

## Ordering Information

Please refer to K1297/K1205 Protocol Tester Hardware, K1205 Base Software and K1297-G20 Base Software Product Summaries for further information.

Please note that besides the following ordering numbers (for complete version) upgrades and offline software are available.

#### Transport, ISUP and IN Protocol Packages for K1205

7PK1205-6TN11 - K1205 Protocol SW Mon Transport Narrowband Package; MTP L2, MTP L3, MTP T&M, LAP D, LAP D Management, LAP V; Prerequisite: Current System Version (7KK1205-6ABxx) and Narrowband Line Interface Board.

**7PK1205-6TC11 –** K1205 Protocol SW Mon Transport SCCP Package; SCCP/SCMG; TCAP; OMAP; Prerequisite: Current System Version (7KK1205-6ABxx) and 7PK1205-6TN.

**7PK1205-6TP11 –** K1205 Protocol SW Mon Transport Packet Data Package; incl. X.25, LAP B, FR, IPv4, IPv6, ARP/RĂRP, EGP, RIP, TCP&UDP, ICMP, IEEE802.3 MAC; GPRS Gi; Prerequisite: Current System Version (7KK1205-6ABxx).

7PK1205-6CS11 - K1205 Protocol SW Mon Core ISUP/TUP Package; for standard, country and vendor specific ISUP/TUP variants: Prerequisite: Current System Version (7KK1205-6ABxx) and 7PK1205-6TN11 and/or -6TC11.

7PK1205-6CJ11 - K1205 Protocol SW Mon Core Intelligent Networks Package; for standard, country and vendor specific variants; Prerequisite: Current System Version (7KK1205-6ABxx) and 7PK1205-6TC11.

► Transport, ISUP and Intelligent Network Software

#### Transport, ISUP and IN **Monitoring Protocol Packages** for K1297-G20

7PK1221-6TN11 - K1297-G20 Protocol SW Mon Transport Narrowband Package; incl. MTP L2, MTP L3, MTP T&M, LAP D, LAP D Management, LAP V: Prerequisite: Current System Version (7KK1220-OSCxx) and Narrowband Line Interface Board.

7PK1221-6TC11 - K1297-G20 Protocol SW Mon Transport SCCP Package; incl. SCCP/SCMG; TCAP; OMAP; Prerequisite: Current System Version (7KK1220-OSCxx) and 7PK1221-6/7TN11 or -6/7TB11.

7PK1221-6TP11 - K1297-G20 Protocol SW Mon Transport Packet Data Package; incl. X.25, LAP B, FR, IPv4, IPv6, ARP/RARP, EGP, RIP, TCP&UDP, ICMP, IEEE802.3 MAC; GPRS Gi; Prerequisite: Current System Version (7KK1220-OSCxx) and Ethernet or ATM board.

**7PK1221-6TB11 –** K1297-G20 Protocol SW Mon Transport Broadband Package; SSCOP (Q.2110), SSCF-UNI (Q.2130), SSCF-NNI (Q.2140), MTPL3b (0.2210); Prerequisite: Current System Version (7KK1220-0SCxx) and ATM HW.

7PK1221-6CS11 - K1297-G20 Protocol SW Mon Core ISUP/TUP Package; incl. standard, country and vendor specific ISUP/TUP variants; Prerequisite: Current System Version (7KK1220-0SCxx) and 7PK1221-6/7TN11 or -6/7TC11.

7PK1221-6CJ11 - K1297-G20 Protocol SW Mon Core Intelligent Networks Package; incl. standard, country and vendor specific INAP/TCAP variants; Prerequisite: Current System Version (7KK1220-0SCxx) and 7PK1221-6/7TC11.

#### Transport and ISUP Monitoring/Simulation/Emulation **Protocol Packages for** K1297-G20

7PK1221-7TN11 - K1297-G20 Protocol SW Mon Transport Narrowband Package; incl. MTP L2, MTP L3, MTP T&M, LAP D, LAP D Management, LAP V; Prerequisite: Current System Version (7KK1220-0SCxx) and Narrowband Line Interface board.

7PK1221-7TC11 - K1297-G20 Protocol SW Mon Transport SCCP Package; incl. SCCP/SCMG; TCAP; OMAP; Prerequisite: Current System Version (7KK1220-0SCxx) and 7PK1221-6/7TN11 or -6/7TB11.

7PK1221-7TP11 - K1297-G20 Protocol SW Mon Transport Packet Data Package; incl. X.25, LAP B, FR, IPv4, IPv6, ARP/RARP, EGP, RIP, TCP&UDP, ICMP, IEEE802.3 MAC; GPRS G; Prerequisite: Current System Version (7KK1220-0SCxx) and Ethernet or ATM board.

7PK1221-7TB11 - K1297-G20 Protocol SW Mon Transport Broadband Package; SSCOP (Q.2110), SSCF-UNI (Q.2130), SSCF-NNI (Q.2140), MTPL3b (Q.2210); Prerequisite: Current System Version (7KK1220-0SCxx) and ATM HW.

7PK1221-7CS11 - K1297-G20 Protocol SW Mon Core ISUP/TUP Package; incl. standard, country and vendor specific ISUP/TUP variants; Prerequisite: Current System Version (7KK1220-0SCxx) and 7PK1221-6/7TN11 or -6/7TC11.

7PK1221-7CJ11 - K1297-G20 Protocol SW Mon Core Intelligent Networks Package; incl. standard, country and vendor specific INAP/TCAP variants; Prerequisite: Current System Version (7KK1220-0SCxx) and 7PK1221-6/7TC11.

7KK1223-8JS11 - K1297-G20 Emu entity Network Element Core&Intelligent Network (SCP); for CAMEL Ph1 and ETSI Core INAP CS-1; Prerequisite: Current System Version (7KK1220-0SCxx) and 7PK1221-7CJ11 or -7MG11.

#### Transport, ISUP and IN Bundles

7KK1205-6SC11 - K1205 SW Mon Core&Intelligent Network (SS#7 + IN); Containing: 7PK1205-6TN, 7PK1205-6TC, 7PK1205-6CS, 7PK1205-6CJ; Prerequisite: Current System Version (7KK1205-6ABxx).

**7KK1221-6SC11** – K1297-G20 SW bundle Mon Core&Intelligent Network (SS#7 + IN); incl. country variants; containing: 7PK1221-6TN, 7PK1221-6TC, 7PK1221-6CS, 7PK1221-6CJ; Prerequisite: Current System Version (7KK1220-0SCxx).

7KK1221-7SC11 - K1297-G20 SW bundle Mon/Sim/Emu Core&Intelligent Network (SS#7 + IN); incl. country variants; containing: 7PK1221-7TN, 7PK1221-7TC, 7PK1221-7CS, 7PK1221-7CJ; Prerequisite: Current System Version (7KK1220-0SCxx).

► Transport, ISUP and Intelligent Network Software

#### Contact Tektronix:

ASEAN Countries & Pakistan (65) 6356 3900

Australia & New Zealand (65) 6356 3900

Austria +43 2236 8092 262

Belgium +32 (2) 715 89 70

Brazil & South America 55 (11) 3741-8360

Canada 1 (800) 661-5625

Central Europe & Greece +43 2236 8092 301

**Denmark** +45 44 850 700

Finland +358 (9) 4783 400

France & North Africa +33 (0) 1 69 86 80 34

Germany +49 (221) 94 77 400

Hong Kong (852) 2585-6688

India (91) 80-2275577

Italy +39 (02) 25086 1

Japan (Sony/Tektronix Corporation) 81 (3) 3448-3111

Mexico, Central America & Caribbean 52 (55) 56666-333

The Netherlands +31 (0) 23 569 5555

Norway +47 22 07 07 00

People's Republic of China 86 (10) 6235 1230

Poland +48 (0) 22 521 53 40

Republic of Korea 82 (2) 528-5299

Russia, CIS & The Baltics +358 (9) 4783 400

**South Africa** +27 11 254 8360

**Spain** +34 (91) 372 6055

**Sweden** +46 8 477 6503/4

Taiwan 886 (2) 2722-9622

United Kingdom & Eire +44 (0) 1344 392400

USA 1 (800) 426-2200

For other areas contact Tektronix, Inc. at: 1 (503) 627-7111

Updated 8 February 2002



2FW-15359-0

For the most up-to-date product information visit our web site at WWW.tektronix.com

Copyright © 2002, Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.

03/02 HB/XBS

