PRODUCT DESCRIPTION

The Fully Featured Harrier continues to provide the best price versus feature package on the market and includes many unique features to delight both the novice and experienced user. The extensive test menu, user selectable in English, French, German or Spanish, provides complete flexibility to verify services and exercise service options at both the ISDN and PSTN interfaces. The test telephone shape, with keypad and display positioned to face the user and control keys placed in the handle section, provides an exceptional instrument to verify voice and data services at the subscriber's location and physical layer integrity by performing bit-error rate tests (BERT).

FEATURES

- ISDN U & S/T Interface
- PSTN Z Interface
- Private Circuit - No Protocol
- S Bus Passive Monitor
- D Channel Packet Service Test
- Simple 3 key operation
- Backlit 2 line 32 character display
- Menu selectable protocol & language
- Field upgrade by software download
- Full duplex hands-free operation
- Cause code & message display
- Events logging & management
- Serial Interface Kit
- D Channel Passive Monitor
- D-View Protocol Analysis (Option)

The Fully Featured Harrier now includes an extended range of Supplementary Services tests in addition to the capability to enter non standard Higher Level Compatibility (HLC) information elements via the Teleservices menu. Time stamped Events equivalent to 300 lines of information can be saved for subsequent output to a printer or PC. Harrier will also operate as a passive D-Channel monitor to diagnose problems at the S/T interface. The D-Channel messages are displayed on the LCD and output to the serial port in real time.

D-View Protocol Analysis (Option)

This option provides Windows based software that translates the D Channel protocol stream into English text and turns the Harrier into a sophisticated ISDN Protocol Analyser.
SPECIFICATIONS

Tests and Measurements
Voltage Measurements with on screen limits:
S interface Phantom feed, restricted and normal
S interface power source 2 voltage
U interface voltage
Analogue port polarity and DC volts
Harrier Battery voltage

Voice call tests:
B channel DTMF or Info E D channel messages
Speech Compressing: Menu selectable A law or µ law
Select B1, B2 or Bx with 3.1kHz, 7kHz, data or speech bearer

Incoming call Information:
The Harrier alerts displaying: bearer, Calling number and DDI/MSN digits

GR21 Bit Error Rate Tests:
Measure - Bit errors, Test duration, BER, LIAT, ES, SES, DM.
Actual readings and % are recorded and displayed
Method - Call another Harrier, Call loopback robot, or selfcall
Duration - 1, 15 minutes, 1 hour, user set or continuous
Bearer - Speech or 64Kb/s
Auto answer and loop or auto answer and BER
The Harrier can be set up to loop, or PRBS check and PRBS generate on receipt of Data or Voice calls

Automatic and individual teleservice tests:
Self call to check if all the following are enabled:
Telephony Telefax G2/G3, Telefax G4, Teletex, Videotex, Mixed Mode, OSI, Telex and User set HLC value

Automatic and single supplementary services tests:
Prove User CUR, Network CLIP, DDI, MSN, User subaddress, NSAP subaddress, CFN, CFR, CPN, COLP, COLR, HOLD, MCD, CD, CW, AGC-E and TP

THE FULLY FEATURED HARRIER IS SUPPLIED COMPLETE WITH:
• HARRIER HAND HELD TESTER, TEST SOFTWARE AND CARRY BAG
• S INTERFACE CABLE
• U AND Z INTERFACE CABLE
• SERIAL CABLE
• 25 PIN TO 9 PIN D TYPE CONNECTOR
• QUICK REFERENCE GUIDE
• USERS GUIDE
• D-CHANNEL PROTOCOL DECODE, EVENTS LOG MANAGEMENT AND TERMINAL MODE SOFTWARE
• PASSIVE MONITOR CAPABILITY

OPTIONS
• FRENCH D CHANNEL X.25 TESTING
  Only available for the French language Harrier variant
• D-VIEW PROTOCOL ANALYSIS (OPTION)
  Windows based software instructions and “dongle”
• UK POWER SUPPLY/BATTERY CHARGER
• EUROPEAN POWER SUPPLY/BATTERY CHARGER

Interfaces
ISDN S:
Used in TE mode and D channel monitor mode
ISDN Basic Rate Access ITU-T 1.430 Layer 1 ETS 300 012
ISDN S: Termination: (Menu selectable)
High Impedance or 100 Ω
ISDN S: Mode options: (Menu selectable)
Passive D channel monitor and/or NT S bus output simulation
ISDN U: Used in NT mode
2B1Q to ANSI T1.601-91, ETSI DTR/TM 3002
ISDN Z: (Analogue):
DTMF and pulse dial, maximum loop current 100mA
15-70Hz Incoming call alert, 20 - 70v RMS ring volts
Monitor Mode Impedance >100 kΩ, max DC 60v
Monitor Mode DC polarity and voltage readout

Access protocols:
Layer 2: ETS 300 125
Layer 3 is menu selectable
ETS 100 102 or none

Dialling Modes:
No protocol, Overlap, en bloc with subaddress, en bloc without subaddress, 10 x 30 digit number store, redial

Intelligent Power Management:
Automatic running from Network Termination point, PP3 Ni-MH rechargeable, PP3 Alkaline battery, Local mains derived supply via power supply/battery charger (option)

Message buffer:
99 line buffer records Layer 1, 2, 3 & Display messages using menu selectable filters

General
Menu system
Navigated using backlit, 2 line, 32 character dot matrix display and three handle mounted function keys:
SELECT - select menu option; dial call; re-dial; on
SCROLL - scroll through menu options
CLEAR - return to top menu; clear call; switch off
Alpha/numeric data and menu short cuts entered via full telephone keypad

Languages: English, French, German and Spanish
Continuous B Channel status info. on two tricolour LEDs

Serial Port:
Optically Isolated
Size: 240 x 71 x 85mm
Weight: 0.5kg inc. Batt.
Case: High impact plastic body with Silicone rubber hand/shoulder grip.
Operational Temperature:
0º to 50ºC
Storage Temperature:
-40ºC to 70ºC