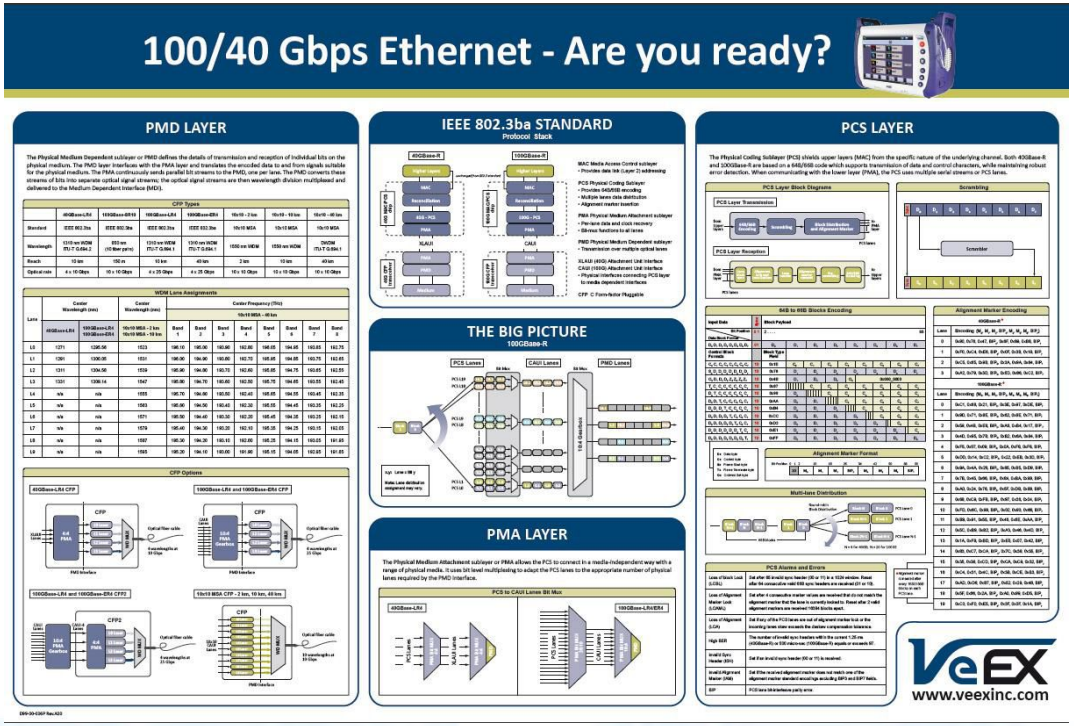
HKE
elektronické měřicí přístroje

Technologie 100G / 40G v přístrojích VeEX

Měření v transportních sítích

Multiservice platform – více technologií v jediném testeru

HKE
elektronické měřicí přístroje



Modulární řada RxT-1200

HKE
elektronické měřicí přístroje

Current Version 02.00.0044

Improvements

- New Built-in VeExpress Request & Release functions and improved direct SW upgrade
- New off-line option activation via license key
- Direct results file launch for PCAP, OTDR, Wander,…
- New Sleep Mode with Holdover
- New Wi-Fi Access Point (AP) mode
- Improved Test Mode selection menu
- OPX BOX+ and V-Scout link mapper support
- Improved Fiber Scope auto focus detection

Roadmap

- Improved Web Remote (without Java plug-in)

Modul RxT- 6000

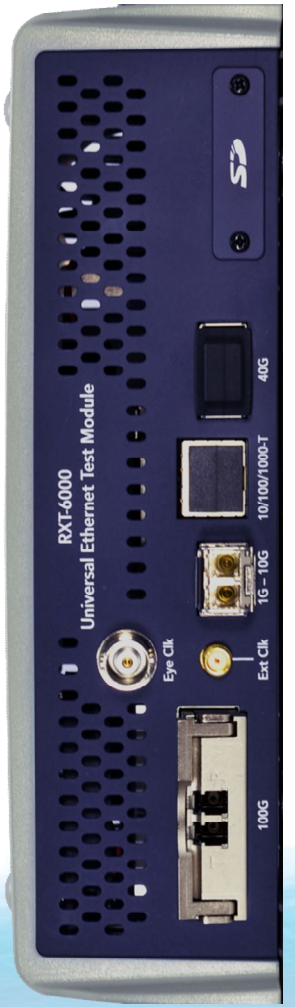
HKE
elektronické měřicí přístroje

Current Version: 02.00.0042

Improvements

- Full OTN, EoOTN and SDH/SONET/PDH/SDH Mapping/Multiplexing
- OTU4/OTU3 Channel and Port Detection and Configuration
- OTU4/OTU3 Line and Payload Through transparency modes
- STL256.4 STM-256/OC-768 support

No need for transciever adapters, all formats supported. Smallest 10G – 100G tester



Modul RxT- 3000

HKE
elektronické měřicí přístroje

Current Version: 02.00.0022

Improvements

- All in one 64 kbit/s – 11.7 Gbit/s module
- Advanced OTN sub-rate multiplexing (SDH/SONET and PDH/DSn)
- Async, Byte and Bit Sync E1 mapping into SDH and non-test channel settings
- Improved Wander Measurements and external reference clock lock
- E1 Pulse Shape Analysis improvements
- Added V-Test, V-FTP, V-PERF, VoIP

Coming soon

- Improved PDV measurements and calculation
- G.703 64K Codirectional Interface Testing

TX300S + 100G option jediný tester od 64 kbit/s do 100G

HKE
elektronické měřicí přístroje

Current Version:

- CFP4 for 100G and QSFP+ for 40G
- Ethernet testing only (for now)
- Note: No Atomic Clock option, No RS232, No Sleep Mode

Coming Soon

- Expect similar functionality as in the UX400-100G CFP4, plus opt. TX320SM
- Full OTN, EoOTN and SDH/SONET/PDH/SDH Mapping/Multiplexing
- OTU4/OTU3 Channel and Port Detection and Configuration
- OTU4/OTU3 Line and Payload Through transparency modes
- STL256.4 STM-256/OC-768 support

MTTplus - modul 320

Dual-port SFP+ with similar level of functionality as the TX320SM

- Familiar VeEX GUI, Tools and Options

Features

- OTN, OTU1e, OTU2e, ODU0/ODUflex, SDH, SONET, PDH, DSn, ISDN, VF
- Clock Wander & Phase Measurements
- 10/100M, 1G & 10G Ethernet
- V-Route, V-PERF, V-Test, V-FTP,…
- 1/2/4/8/10G Fibre Channel
- CPRI/OBSAI
- G.703 64k Codirectional and IEEE C37.94
- VeExpress integration
- Ambient light sensor ready (Auto-dim and dark/light GUI color schemes)

Roadmap

- Continue to follow TX320SM steps, in terms of new features and improvements
- Bidirectional pass-through PTP monitor with PDV performance measurements

ITU-T C37.94 - Teleprotection

HKE
elektronické měřicí přístroje

C37.94 Defines a “high-speed” multimode optical link for power line telemetry

- 850nm MM Fiber – Not prone to interference or shocks
- Nx64k data rates (N = 1 to 12). Line rate is always 2.048 Mbit/s

Test option available in TX320sm and MTTplus-320 Multi-service test modules

Basic BER Testing for basic (PDH-like) point-to-point links

Feature	VeEX 320 Modules		Sunrise MTT-45	
64k to 768k (N = 1 to 12)	Yes		Yes	
BERT & G.821	Yes	Bit, FAS	Yes	
Error Generation	Yes	Bit, FAS	No	
Alarm Detection	Yes	LOS, AIS, RDI, LSS	Yes	AIS, Doesn’t work
Alarm Generation	Yes	LOS, AIS, RDI	No	
Round Trip Delay	Yes	Res 0.001 ms (100m)	Yes	1 ms, Doesn’t work
Terminal Mode	Yes	TX1/RX1	Yes	TX/RX
Bidirectional Pass-Through	Yes	RX1→TX2, RX2→TX1	No	
1310nm MMF or SMF	Yes	Via SFP	No	

Ucelená nabídka 100G řešení

HKE
elektronické měřicí přístroje

How do you want your 100G, sir?

The Complete Solution

- UX400-100G CFP
- UX400-100G CFP2 (40G QSFP+)
- UX400-100G CFP4 (40G QSFP+)
- UX400-100G QSFP28 (40G QSFP+)
- RXT-6000 100G CFP2 (40G QSFP+, SFP+, RJ45)
- TX300s-100G CFP4 (40G QSFP+)

Common feature set and user interface

Advanced OTN, EoOTN and Flexible Payload multiplexing features

- Test Payloads: 1, 10, 40, 100G Ethernet; SDH/SONET, PDH/DSn, Bulk (PRBS)

40G SDH with STL256.4 support (single wavelength and 4x10G)

Vzdálený přístup bez Java plug-ins

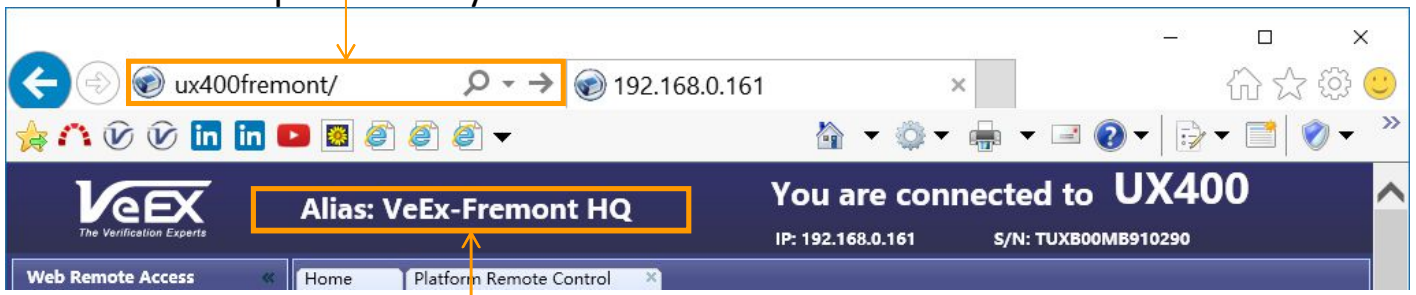
HKE
elektronické měřicí přístroje

Good News! The annoying Java Plug-in is no longer required

- Better network security compatibility
- Add support for newer browsers (plug-ins no longer supported), tablets and phones
- All applicable ports are listed in the >Remote Access menu

Network Host Name

- No need to keep track of dynamic IP addresses in DHCP environments



Test Platform Name

- Identify test platforms by location, group, application, etc.

VNC Clients now require to add Port 6900 to the target IP address

100G modul – nové vlastnosti

HKE
elektronické měřicí přístroje

Current version 3.10.7

Improvements and new features

New Local One Way Delay feature; measurements can be done between any two ports of different 100G modules (same chassis).

Loopback control

Loopback statistics; total frame count

Test pattern compatibility between 1GE and 10GE interface products. NOTE: if testing against a RXT6000 use the latest version as well for compatibility.

New OWD with GPS

Increased maximum frame size from 10K to 16K bytes.

OTU4 and OTU3 with SDH/SONET/PDH/DSn Multi-Step Sub-rate Map/Mux test mode options.

STL256.4 SDH/SONET with PDH/DSn sub-rate multiplexing option.

10G, 2,5G, 1G, Combo, 16G FC, OSA

HKE
elektronické měřicí přístroje