

ARGUS®

TRIPLE PLAY TESTING VIA xDSL AND GIGABIT ETHERNET

**IPv6
READY**



ADSL

VDSL

SHDSL

ETH

SFP

ISDN

POTS

Cu

TDR

Data
101101011011

IP TV

Vo IP

MOS

PC

USB

intec

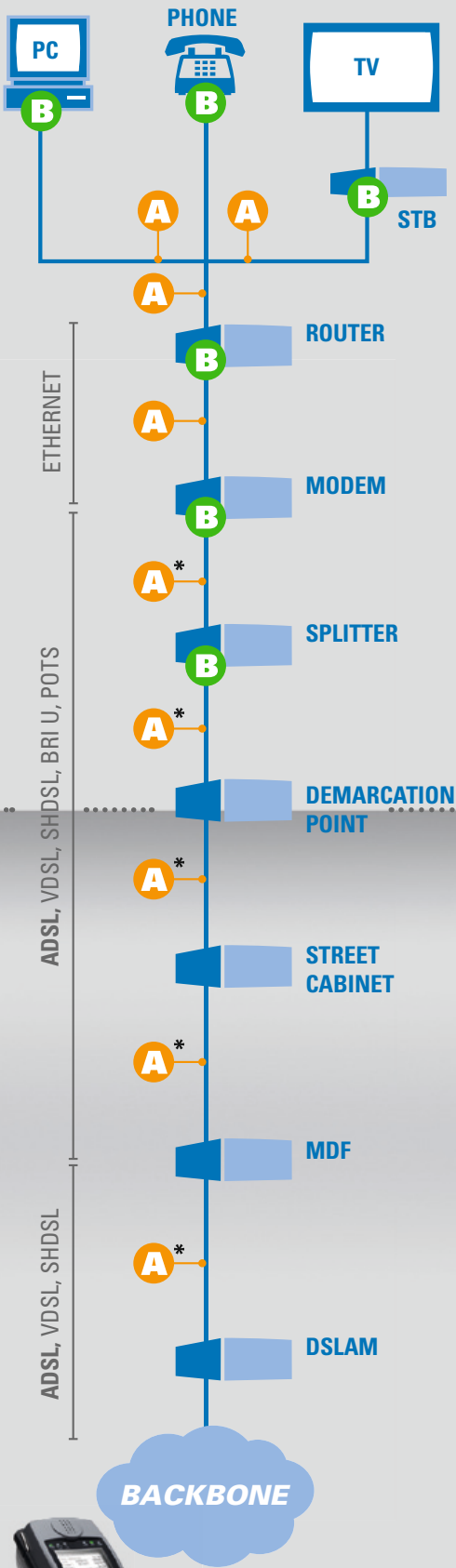
GESELLSCHAFT FÜR
INFORMATIONSTECHNIK mbH

Where to test with ARGUS?

What has to be configured for Triple Play testing?

INSIDE

OUTSIDE



A Connect to
B Replace

* Connection points in example

TESTS	IP PING	IP PING	IP PING
	TRACE ROUTE	TRACE ROUTE	TRACE ROUTE
	HTTP DOWNLOAD	VoIP CALL	IPTV
	FTP UP-/DOWNLOAD	VoIP WAIT	IPTV SCAN
	FTP SERVER	VoIP PESQ TEST	MDI ANALYSIS

SERVICES	DATA	VoIP	IPTV

VIRTUAL LINES	IP	IP
	PPPoE	
	VLAN 7	VLAN 8
	ETHERNET (EFM) / MAC	
	ATM 1/32	

PHYSICS	ADSL Annex A, L, M	10/100 Base-T
	ADSL Annex B, J	100 Base-FX/LX
	VDSL 2 (up to 30a)	1000 Base-T
	SHDSL EFM n-wire	1000 Base-SX/ZX/LX
	SHDSL ATM n-wire	1000 Base-BX

The huge demand for Triple Play services via DSL lines requires the test equipment to separate different services by means of different prioritization. Handling of the increasing amount of data and the different services also requires the use of various protocols and authentication processes.

TESTING

CONFIGURATION

How you only need to configure ARGUS once to perform triple Play tests?

DATA

HTTP download
Progress
Test 1/3
Current 016 %
Bitrate
Current 12.176 Mb/s

TESTS

Download

VoIP

VoIP call
Connected!
0:00:04
MOS:4.3
Good
G.711 Alaw
From:7087
To: 87

TESTS

VoIP call

IPTV

IPTV UDP test
cur.values:
Jitter: 6
C.err.: 0.0
Latency: 43

TESTS

IPTV test

Profile ISP xyz
Data VoIP IPTV VoD
ADSL ATU-R Anx A(2+) ✓
kb/s: 25399/ 1263
CRC: 0/ 0
U: -0.4V

SERVICES

Data

Profile ISP xyz
Data VoIP IPTV VoD
ADSL ATU-R Anx A(2+) ✓
kb/s: 25399/ 1263
CRC: 0/ 0
U: -0.4V

SERVICES

VoIP

Profile ISP xyz
Data VoIP IPTV VoD
ADSL ATU-R Anx A(2+) ✓
kb/s: 25399/ 1263
CRC: 0/ 0
U: -0.5V

SERVICES

IPTV

TESTING

CONFIGURATION

ID7	VLAN	VIRTUAL LINE 1
1/32	VPI/VCI	
PPPoE	ATM	VIRTUAL LINE 1
ETHERNET YES		
PPP	PROTOCOL	VIRTUAL LINE 1

ID8	VLAN	VIRTUAL LINE 2
1/32	VPI/VCI	
EoA	ATM	VIRTUAL LINE 2
ETHERNET YES		
IP	PROTOCOL	VIRTUAL LINE 2

Profile ISP xyz
Data VoIP IPTV VoD
ADSL ATU-R Anx A(2+) ✓
kb/s: 25399/ 1263
CRC: 0/ 0
U: -0.4V

VIRTUAL LINE 1

PPP

Profile ISP xyz
Data VoIP IPTV VoD
ADSL ATU-R Anx A(2+) ✓
kb/s: 25399/ 1263
CRC: 0/ 0
U: -0.4V

VIRTUAL LINE 2

IP



Example:

ARGUS on ADSL Annex A



Profile ISP xyz
Data VoIP IPTV VoD
ADSL ATU-R Anx A(2+) ✓
kb/s: 25399/ 1263
CRC: 0/ 0
U: -0.5V

PHYSICS

IP

TESTING

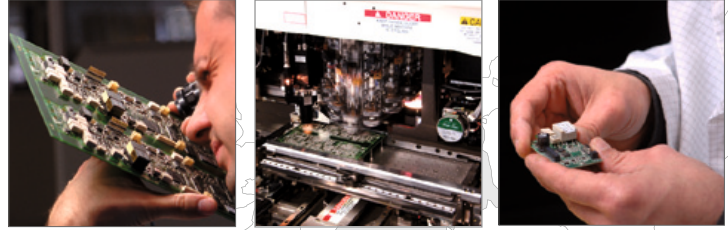
CONFIGURATION

In use throughout Europe

intec Gesellschaft für Informationstechnik mbH is developing products for the international telecommunications market for more than 20 years and is one of the leading suppliers for xDSL, ISDN and IP measurement technology in Europe today.

With the aid of ARGUS measurement equipment, users can conveniently and safely commission and troubleshoot xDSL and ISDN accesses as well as inspect services like VoIP and IPTV based hereon. ARGUS testers are designed to meet the day-to-day needs of the field staff; consequently intec engineers focus on ensuring high-quality measurements combined with simply and convenient operation.

The portfolio of ARGUS testers, software and analyzers benefits from a continuous development and is kept up-to-date with support for the current standards for all the common access types and protocols as well as for the features of the Next Generation Networks (NGN) and Triple Play services. Throughout the world, numerous telecommunication companies have come to appreciate and rely on the advantages offered by intec equipment; to name just a few Deutsche Telekom, Saudi Telecom, Telefonica, KPN, British Telecom and Telekom Austria.



ARGUS[®] MADE IN GERMANY

intec

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ARGUS overview

	165	145 plus	142	42 plus	141	42 basic	125	3u NT	3u plus	3u basic
VDSL2	✓ ³	✓ ³	✓ ³		✓					
ADSL ¹	✓ ³	✓ ³	✓ ³	✓ ³	✓	✓	✓ ³			
SHDSL	✓	✓								
10/100 Base-T (Cu)	✓	✓	✓	✓	✓		✓			
1000 Base-T (Cu)	✓	✓ ²								
2 x SFP	✓									
BRI U	✓	✓	✓	✓			✓	✓	✓	✓
BRI S/T TE/LL	✓	✓	✓	✓			✓	✓	✓	✓
BRI S/T NT/mon.	✓	✓					✓	✓		
PRI/E1		✓					✓			
POTS	✓	✓	✓	✓			✓	✓	✓	✓
RC	✓	✓	✓	✓			✓	✓	✓	
DMT Analysis	✓	✓	✓		✓					
Line Scope	✓	✓	✓							
Probe	✓	✓	✓							
TDR	✓	✓	✓							
LQ/DELT			✓							
Bridge	✓	✓	✓	✓	✓	✓	✓			
Router	✓	✓	✓	✓	✓		✓			
IP Tests	✓	✓	✓	✓ ²	✓	✓ ²	✓			
Down-/upload	✓	✓	✓	✓ ²	✓		✓			
IPTV/MDI	✓	✓	✓	✓ ²						
VoIP & MOS	✓	✓	✓	✓	✓		✓			
PESQ		✓					✓			
	165	145 plus	142	42 plus	141	42 basic	125	3u NT	3u plus	3u basic

✓ inclusive

✓ optional

✓ minimum one DSL interface is part of the standard package

¹ Annex may vary depending on country.

² On request

³ Online trace in combination with WINAnalyse