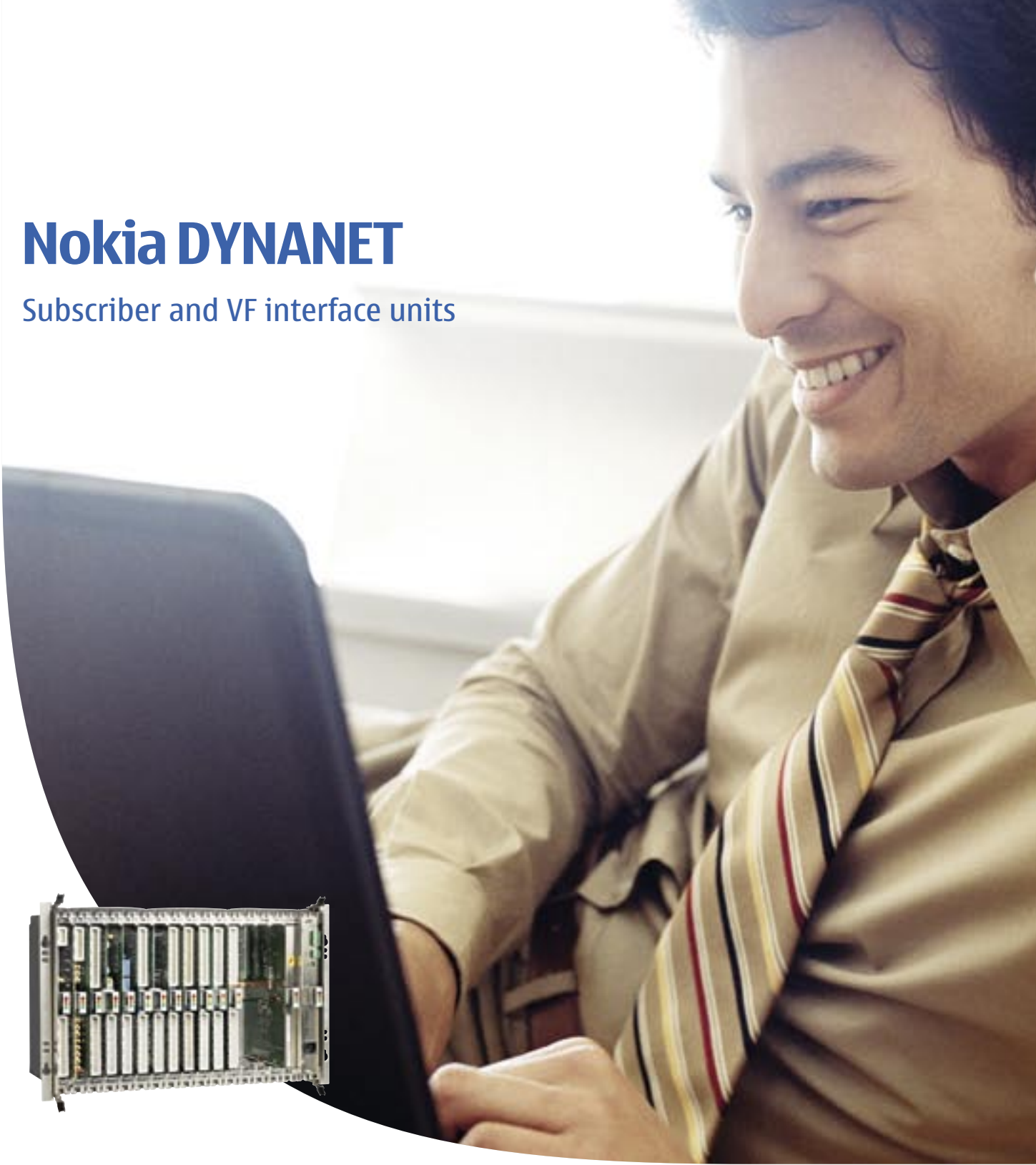


Nokia DYNANET

Subscriber and VF interface units



The Dynanet Subscriber and VF interface units are designed to provide interfaces to the 2 Mbit/s transmission systems with the Nokia Dynanet product family. The core of the Dynanet family consist of primary multiplexing, digital braching and digital cross-connect equipment.

The operation of the subscriber and VF if units are controlled via V.11 service interface of the Dynanet equipment. The user can have access to the service interface by either the hand-held Nokia Service Terminal or the Nokia network Management System (NMS). Control of the unit includes operation selections, settings, alarm indications as well as versatile measurement and testing functions.

Subscriber IF unit & Ring Generator

Subscriber IF unit

The subscriber if units are designed for different applications in public and dedicated networks.

- Increase the capacity of the subscriber networks through better use of the existing cable base
- Provide better economics in the remote areas (remote subscriber multiplexing)
- Make a step towards digitalizing small analogue exchanges
- Overcome attenuation problems in the remote subscriber networks
- Point-to-point hotlines

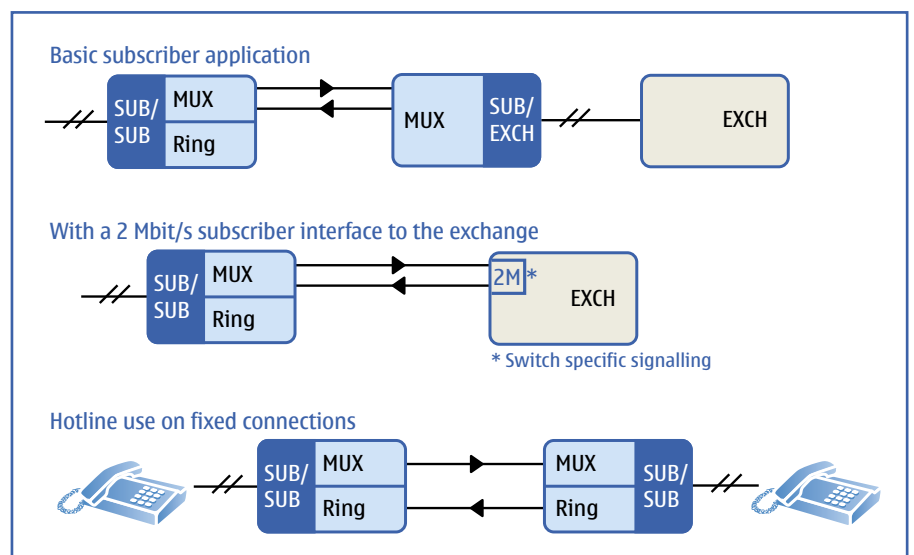
Ring Generator

The ring generator unit is needed with subscriber interface units to generate the ringing voltage used for the ringing tone of the telephone set.

There are two different ring generator units available, one with ring generator features and other one with ring generator and DC/DC converter features. DC/DC features are needed when the battery voltage is not close to -48 VDC.

Technical Data

Product Codes			
21206	Channel Unit SUB/SUB		
21216	Channel Unit SUB/EXCH		
21206.50	Channel Unit RSM (L/E Start)(6 ch)		
25060.00	Program for 21206		
25160.00	Program for 21216		
25056.03	Program for 21206.50		
T37885.01	NDM Ring generator		
T37885.02	NDM Ring gen. with 24-70 to 48V conv		
	21206	21206.5	21216
Channels per unit	6	6	6
Idle power consumptions	5W	5W	5W
Battery voltage	48 V (24V with DC/DC converter)		
Nominal levels (default)	RX:-7 dBr, TX:0 dBr	RX: 0 dBr, TX: 0 dBr	RX:-4 dBr, TX:-3 dBr
ITU-T recommendations	G.712, G.713, Q.552		
Features			
Subscriber line feed	Floating DC loop	Floating DC loop	
Ringing			Ringing detection
Ground key detection	Ground Key		
Dialling	Dialling regeneration		
Metering	12 kHz		12 kHz
Signalling	Loop start	Earth/Loop start	
Mechanical Dimensions			
H x W x D	233 mm x 25 mm x 160 mm		
Environmental Specification			
Operation	ETS 300 019, Class 3.1 E		
EMC	ETS 300 386 (2000)		



10- and 8-channel VF-interface Units with E&M Signalling

Both 10- and 8-channel units have a variety of features controlled by software, e.g. channel level settings and 2-wire or 4-wire control.

The Dynanet family contains also combined data and voice interface unit, separate brochure available.

The VF-interface units provide a range of different applications in junction and subscriber networks:

- For leased 2-wire or 4-wire VF connections
- 2-wire or 4-wire connections with one or two E&M channels in public networks or in private PABX networks
- To facilitate signaling code conversation

The interface units have 8 to 10 voice channels with E&M signaling for each voice channel. The two different unit versions are provided, both having mainly the same electrical characteristics but different configuration features.

The 10-channel version is designed to be used with DM2 or DN2 and can be used with DB2 provided with ring generator with DC/DC converter whereas the 8-channel version can be used with all Dynanet equipments.

Both channel units are fully programmable. The following characteristics can be set separately for each channel:

- Channel use
- Channel time slot allocation 1-15 & 17-31
- Two-wire or four-wire VF-interface
- Level setting, separately for two-wire and four-wire interfaces
- Signaling logic
- Balance impedance

Technical Data

Product Codes		
21236	CU 8ch E&M/uP: 2xe&m/VF	
21234.20	Channel Unit E&M/VF-P, 10 ch, 20 E&M ch	
21236.10	CU 8ch E&M/uP: 1xUKe&m/VF	
25360	Prg E/21236,.05 E&M program	
25340.00	Program for 21234 E&M/uP, 10 ch	
25361.00	Program for 21236.10 E&M program	
	10 channel	8 channel
Channels per unit	10	8
ITU-T recommendations	G.711, G.712, G.713, G.714	
Audio-frequency Performance		
Relative levels		
4-wire connection		
input to channel unit	-17.0...+4 dBr	-17.0...+3.5 dBr
output from channel unit	-12.0...+8 dBr	-12.0...+8 dBr
2-wire connection		
input to channel unit	-13.0...+7 dBr	-13.0...+7 dBr
output from channel unit	-15.0...+8 dBr	-15.0...+7.5 dBr
Adjustable in steps of	0.5 dB (software control)	
Nominal impedance	600 ohm	
Return loss 300 to 3400 Hz	20 dB min.	
Idle channel noise	-65 dBm Op max.	
Crosstalk attenuation	65 dB min.	
Signalling		
Signalling bits per channel *	1 or 2	
Distortion, max.	3 ms	
Processing	software control	
Mechanical Dimensions		
H x W x D	233 mm x 25 mm x 160 mm	
Environmental Specification		
Operation	ETS 300 019, Class 3.1 E	
EMC	ETS 300 386 (2000)	

* Note: Signalling channels for each speech channel, 21236 (2+2), 21236.10 (1+1), 21234.20 (2+2)

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Nokia Corporation
Networks
P.O. Box 300
FI-00045 Nokia Group, Finland
Phone: +358 (0) 7180 08000
www.nokia.com

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