DNx access solution Direction Neutral Booster Amplifier 1.8 GHz DNA-1800

- Flexi-split/zero guard band technology
- Downstream 54-1800 MHz
- Upstream 12-684 MHz

Overview

- Less than 6 watts power consumption
- 8k QAM over the entire transmission spectrum

The DNA eliminates the need for diplex filters, the upstream

1800 MHz. The DNx 1.8 GHz is compatible with full duplex

frequency division duplexing (FDD). This low power amplifier

DOCSIS (FDx), extended spectrum DOCSIS (ESD) and

(< 6 Watt) is the ideal building block for a distributed gain

architecture (DGA), as well as for use in existing networks as a booster amplifier. It is the perfect fit for every network operator looking to achieve the DOCSIS 4.0 standard.

is already 684 MHz and the downstream increases to

Additional features

- Simple to use for installers, with minimal training required
- No upgrades needed for future split changes
- Power consumption is reduced by 40% compared with traditional networks
- Operates at a lower temperature, so has a longer lifespan with lower operating costs as there is less need for repairs
- 8k QAM over the entire transmission spectrum



technetix





DNx access solution

Direction Neutral Booster Amplifier 1.8 GHz **DNA-1800**

Specifications

Parameter		MHz	Min	Тур	Мах	Unit	Details	
Frequency range		12 – 1794				MHz		
Impedance				75		Ω		
		54		1.1		dB		
		200		3.7		dB		
		470		6.9		dB		
Gain	DS gain	865		10.9		dB		
		1006		12.2		dB		
		1218		14.8		dB		
		1400		17.3		dB		
		1600		19.1		dB		
		1794		19.8		dB		
	US gain	12		0.6		dB		
		40		1.6		dB		
		200		4.0		dB		
		396		6.4		dB		
		470		7.2		dB		
		684		8.5		dB		
Gain tolerance		12 – 1600			1.0	dB		
		1600-1794			1.5	dB		
Return loss	All ports	12 – 1700	14.0			dB		
		1700-1794	12.0			dB		
Noise figure	DS	54		20.0		dB		
		1794		14.0		dB		
	US	12		22.0		dB		Γ
		684		16.0		dB		
Input range channel power	DS	258 - 1218	6.0	12~22	25.0	dBmV	Full QAM channel load 258-1218 MHz	Γ
	US	12 - 204	6.0	12~26	30.0	dBmV	Full QAM channel load 12-204 MHz	
Input range channel power	DS	258 - 1800	6.0	10~16	19.0	dBmV	Full QAM channel load 258-1800 MHz	
	US	12 - 684	6.0	12~22	26.0	dBmV	Full QAM channel load 12-684 MHz	
Power consumption					6	Watt		
Power passing current					15	A		
Surge protection	All ports				6	kV	IEEE C62.41 CAT C3	
HUM modulation			-60			dBc	Measured at 15 A	
Connectors	In/out						KS 5/8-female	
Enclosure IP rating							IP68	
Weight				0.9(1.98)		kg(lbs)		
	Operating		-40(-40)		+65(+149)	°C(°F)		
Temperature range	Storage		-40(-40)		+85(+185)	°C(°F)		
· · ·	Spec		. ,	+25(+77)	. ,	°C(°F)		

Notes

1

2

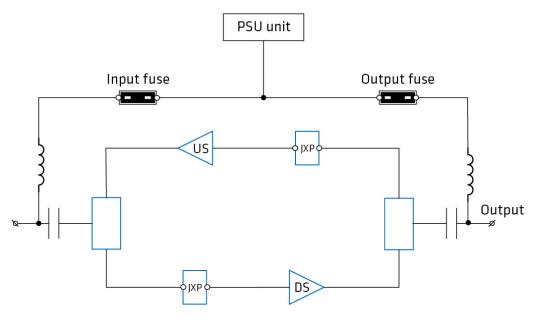
3

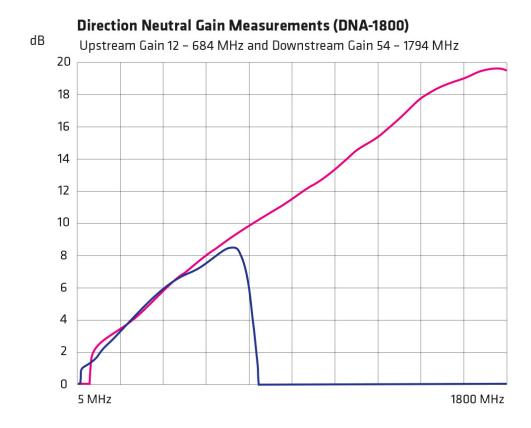
Ordering information

Typical value is the optimal input level per 6 MHz channel for best performance.	Item number	Item code
42 - 90 VAC square wave or 35 - 65 VAC sine wave	19013579	DNA-1800
Specs are optimised and aligned at room temperature	19013579	DNA-1000

Direction Neutral Booster Amplifier 1.8 GHz DNA-1800

DNA-1800 block diagram

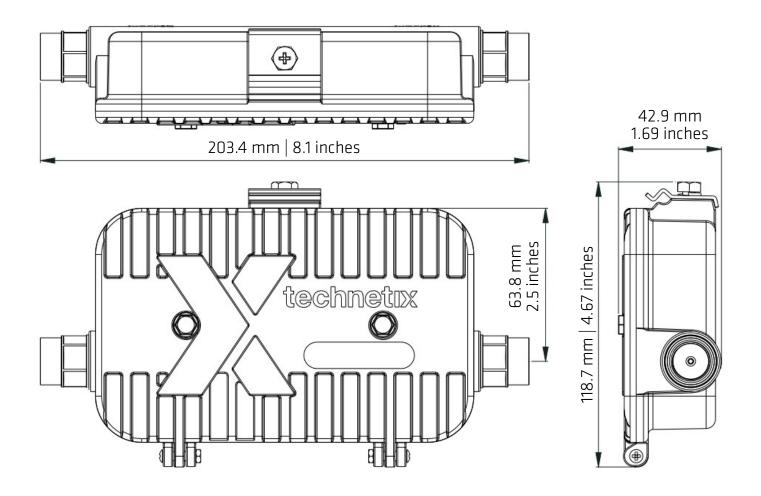




Direction Neutral Booster Amplifier 1.8 GHz DNA-1800

technetix

DNA-1800 mechanical drawing



Technetix Group Limited

e: sales@technetix.com w: technetix.com

02/2023 - EN/V14

© Copyright 2023 Technetix Group Limited. All rights reserved.

This document is for information only. Features and specifications are subject to change without notice. Technetix, the Technetix logo, Technetix Ingress Safe[®], Technetix Modem Safe[®] and certain other marks and logos are trade marks or registered trade marks of Technetix Group Limited in the UK and certain other countries. Other brand and company names are trade marks of their respective owners. Technetix protects its technology and designs by registering patents, trade marks and designs in Europe and certain other countries.