

15-in-1 - 8x8 MIMO LTE and 6x6 MIMO WIFI multi-purpose mobile antenna for GNSS, LTE (617 - 7200 MHz) and WIFI 6E 2.4/4.9-7.2 GHz

BESCHREIBUNG

- The ProNexus Plus is the world's first 8x8 MIMO mobile antenna covering up to 7.2 GHz. A next-generation 8x8 MIMO antenna for fixed and mobile applications, masterfully engineered for 5G and Gigabit Class LTE routers. This cutting-edge 15-in-1 antenna redefines the standards for speed and connectivity within the smallest footprint, enabling maximization of spectral efficiency and minimizing installation costs by reducing the need for additional antennas.
- The worlds first 15-in-1 - No diplexer needed.
- In-built 8x8 MIMO LTE antenna (617 - 960 MHz and 1710 - 7200 MHz) With 6x6 MIMO WiFi 6E (2.4/4.9-7.2 GHz), GNSS antenna for GPS L1, Glonass, Beidou and Galileo.
- The ProNexus Plus provides antennas for multiple technologies and multiband routers.
- The ProNexus Plus covers 4G, GNSS inc. 5G cellular bands, WIFI 2.4/5.8 and 7.2 GHz.
- Full hemispherical coverage for the GNSS antennas.
- Right-Hand Circular Polarization.
- Built-in high gain, low noise amplifier.
- 3 - 15 V DC for GNSS supply.
- DC supply via GNSS RF-connector.
- ECE R118.02 approved cable.
- IP69 Ingress protection.

SPEZIFIKATIONEN

Elektrisch DE	
Modelll	ProNexus Plus
Frequenz	4G/5G 8x8 MIMO: 617 - 960 MHz, 1710 - 7200 MHz WIFI 6x6 MIMO: 2400 - 2500 MHz, 4900 - 7200 MHz
Antennentyp	Mobile Disk Style Antenna
Max. Eingangsleistung	25 W
Polarisation	Vertikal
Impedanz	50 Ω
Gewinn (max.)	4G/5G 3dBi (617 - 960 MHz) 4G/5G 7dBi (1710 - 7200 MHz) WiFi 7 dBi (2.4/5.8/7.2 GHz)
Isolierung *	>10 dB for 617 - 960 MHz >15 dB for 1710 - 7200 MHz >15 dB for WiFi elements
VSWR *	< 2.5:1 for 617 - 960 MHz < 2.0:1 for 1710 - 3800 MHz < 2.0:1 for 2400 - 2500 MHz < 2.0:1 for 4900 - 7200 MHz
EMC	Full protection (EN 301 489-1)



Mechanisch DE	
Beachtung	ECE R118.02 approved cables
Anschlussstyp	SMA(m) / RP-SMA(m)
Materialien	ASA, Zamak 5
Installationsmoment	4 ± 0.5 Nm
Farbe	Black (RAL 9005) or White (RAL 9010)
Abmessungen	Approx. 208 x 166 x 69 mm / 8.19 x 6.5 x 2.7 in.
Maximale Dachdichte	3 mm
Gewicht	1.04 kg
Montage	18.5 mm / 0.8 in. dia. hole

GNSS-Antenne	
Kreuz Polar Diskriminierung (GNSS)	> 10 dB (typ.)
Frequenz (GNSS)	1559 - 1609 MHz (GPS L1, Glonass, Beidou and Galileo)
Polarisierung (GNSS)	RH Rundschreiben
Impedanz (GNSS)	50 Ω

GNSS LNA	
Gewinn (GNSS LNA)	25 dB ±3 dB
Lärmfigur (GNSS LNA)	< 3.5 dB : 1559 - 1610 MHz Typ. 2.0 dB @ 1575 MHz
Attenuation Aus Band (GNSS LNA)	> 25 dB, 0 - 1525 MHz > 25 dB, 1640 - 3000 MHz
P1dB (GNSS LNA)	> 6 dBm
VSWR (GNSS LNA)	< 2.0:1
Spannungsversorgung (GNSS LNA)	3 - 15 V DC
Stromaufnahme (GNSS LNA)	20 mA

Umwelt	
Betriebstemperaturbereich	-50 °C to +75 °C
IP Schutzklasse	IP69K
Aufprallschutz	IK10

NOTE

* Measured with 5 m [196.85 in.] of LMR 195 cable on a 600 x 600 mm [23.6 x 23.6 in.] groundplane.

ORDERING DESIGNATIONS

Use the guide below to assign the name of the ProNexus Plus you would like to order.

Modell Name	Cover color	No. of GNSS	No. of LTE	No. of WIFI antennas	Cable length	Connectors on GNSS	Connectors on LTE	Connectors WIFI
ProNexus Plus	-W (White) -B (Black)	-G1	-L8 (8x LTE antennas)	-W4 (4x WIFI antenna) -W6 (6x WIFI antennas)	Blank (approx. 0.3 m / 1 ft cable length) -P5 (5 m / 16.4 ft cable length)	/S (SMA-M) /FAKRA (on request)	-S (SMA-M) -FAKRA (on request)	/S (SMA-M) /RP-S (Reverse Polarity SMA-M) /FAKRA (on request)
Naming Example								
ProNexus Plus	-B	-G1	-L8	-W6	-P5	/S	-S	/RP-S

ProNexus Plus-B-G1-L8-W6-P5/S-S/RP-S

GAIN TABLE

TYPE	FREQUENCY (MHz)	PEAK GAIN (dBi)	AVERAGE GAIN H-PLANE (dBi)	AVERAGE GAIN H-PLANE (dBq) *
4G/5G	650	2.0		
	900	3.0	-1.0	-1.0
	1800	4.0	-3.0	-2.0
	2500	6.0	-4.0	-2.0
	3600	6.0	-2.0	-1.0
			-3.0	0.0
WIFI	2400	7.0	-3.0	-2.0
	5500	7.0	-2.0	-3.0
	7200	9.0	-2.0	-2.0

* According to TIA-329.2-C

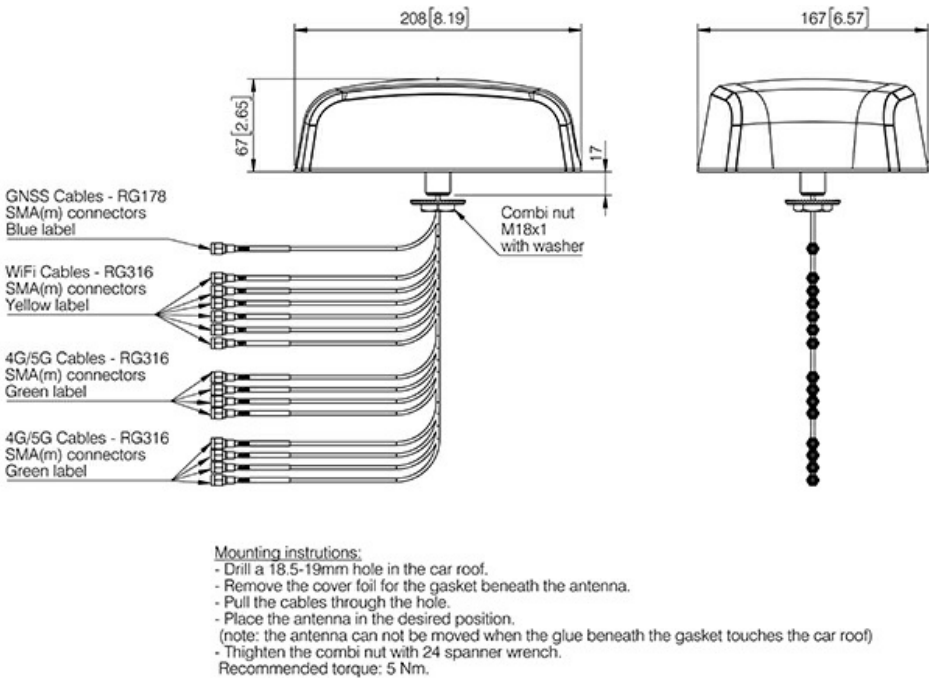
FAKRA CONNECTORS



Amphenol RF FAKRA connectors are available for this product in standard key code configurations. Please contact us with configuration details for availability.

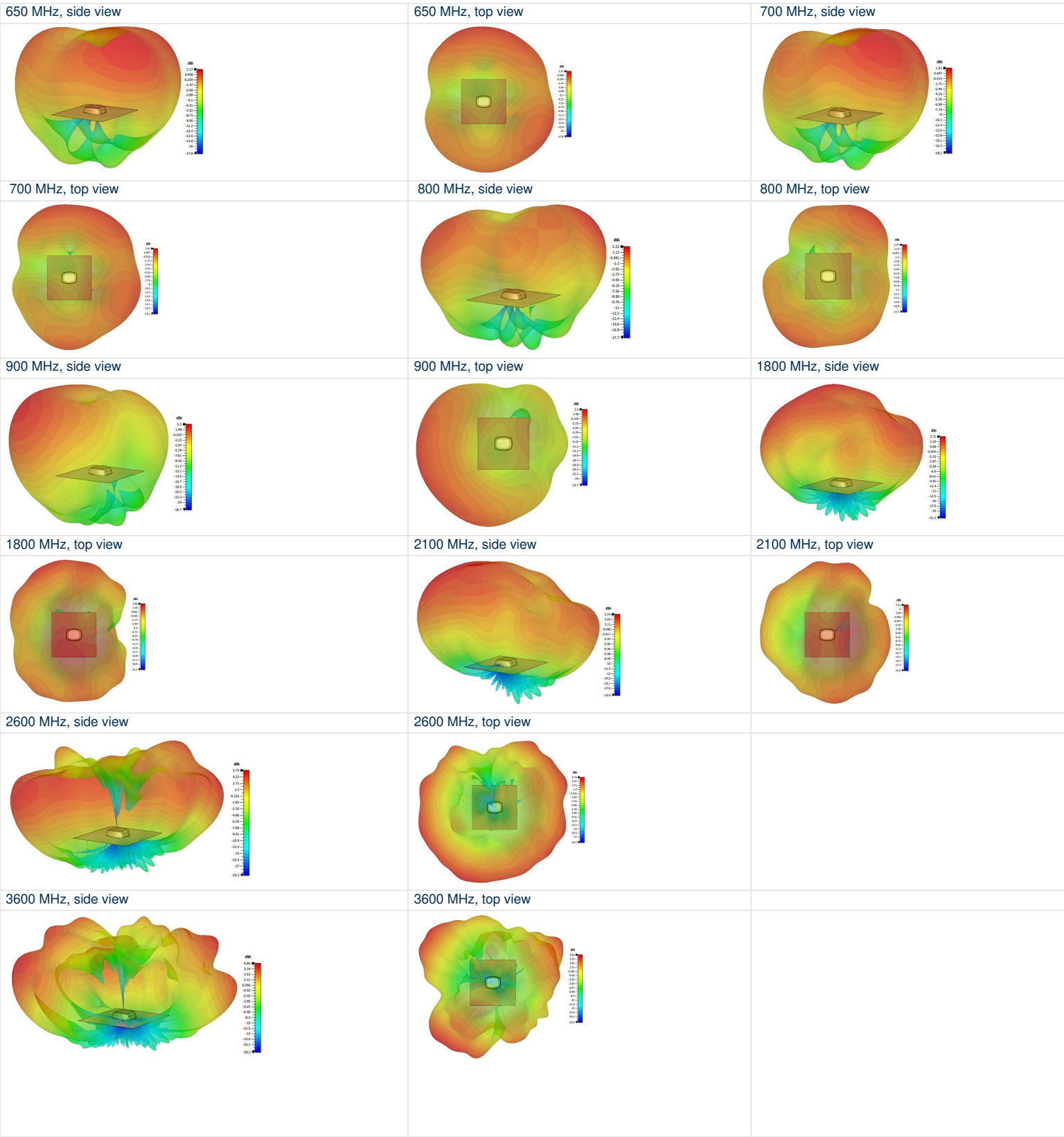
FAKRA Connectors - RF Connectors | Amphenol RF

MECHANICAL OUTLINE

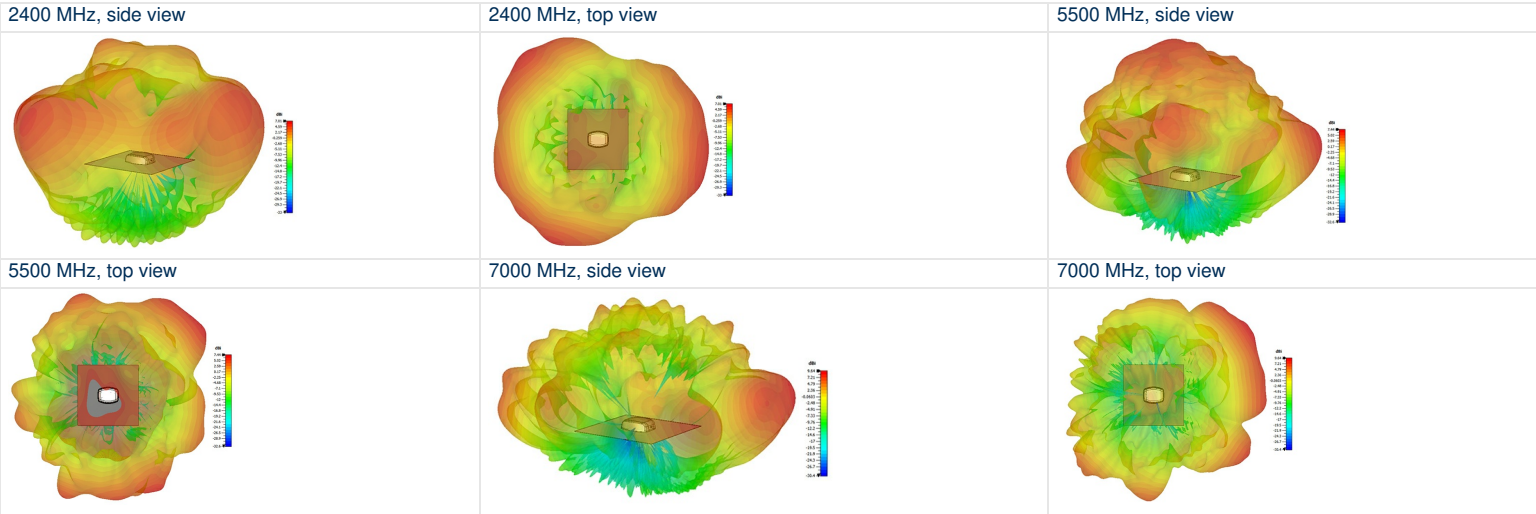


All dimensions are given in mm[in.]

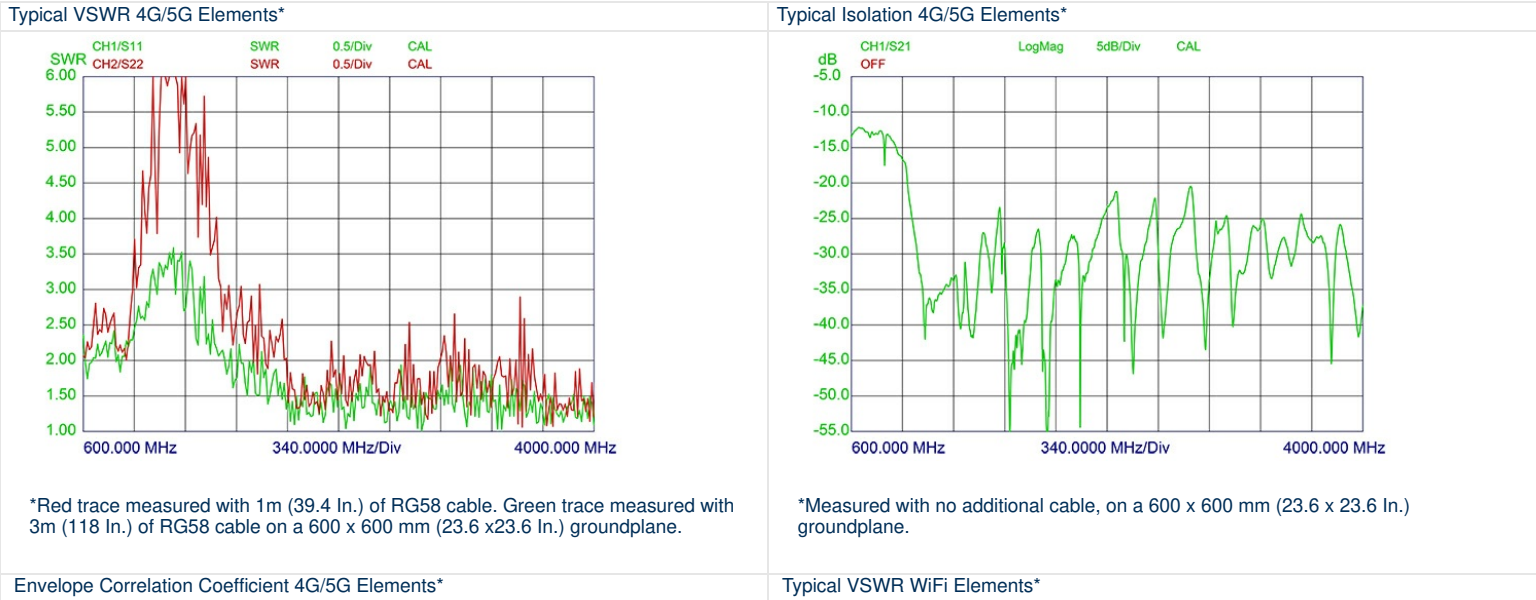
RADIATION PATTERNS (CELLULAR ANTENNAS)

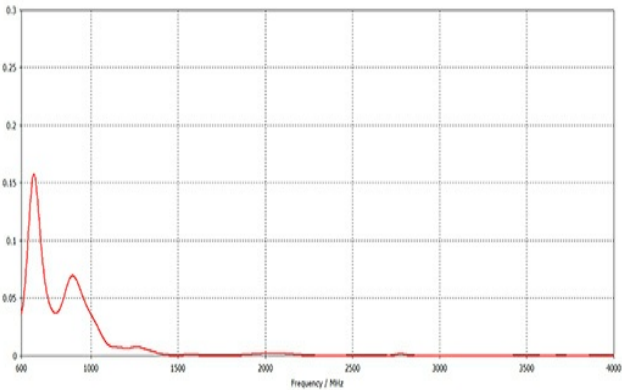


RADIATION PATTERNS (WIFI ANTENNAS)

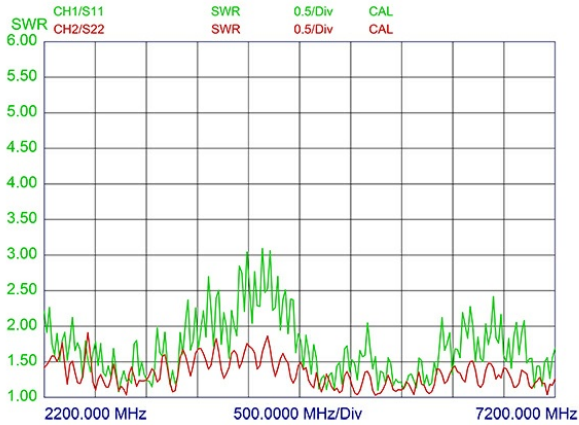


CURVES



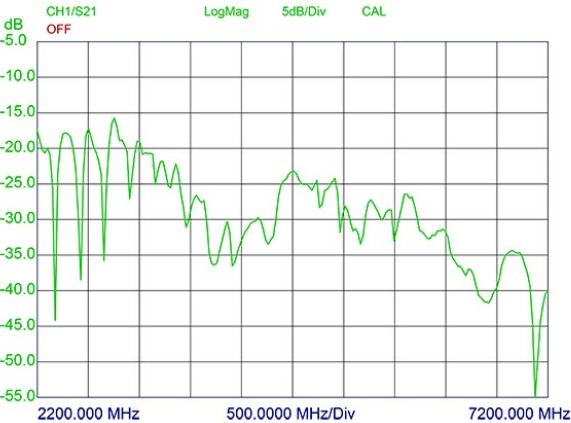


*Simulated in free space with no additional cable.



*Green trace measured with 1m (39.4 In.) of RG58 cable. Red trace measured with 3m (118 In.) of RG58 cable on a 600 x 600 mm (23.6 x 23.6 In.) groundplane.

Typical Isolation WiFi Elements*



*Measured with no additional cable, on a 600 x 600 mm (23.6 x 23.6 In.) groundplane.

EU AND UK DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type ProNexus Plus is in compliance with EU Directive 2014/53/EU and the UK Radio Equipment Regulations 2017 (S.I. 2017 No. 1206).

The full text of the Declaration of Conformity is available at:
<http://amphenolprocom.com/images/shop/catalog/pdf-for-catalogues/Declaration-of-Conformity-ProNexus.pdf>