



DAS SOUNDS GOOD



HiTech Solutions
CONSULTIX

NEURON

EXPRESS GATEWAYS

Public Safety DAS Monitoring System

NEURON EXPRESS

Consultix's Neuron™ is a Distributed Antenna System (DAS) continuity monitoring solution designed to ensure network reliability by providing timely insights into the DAS infrastructure. The system consists of battery-operated probes, known as Neuron tags or beacons, that are mounted directly (or in close proximity) on each DAS antenna. These probes periodically transmit a “keep-alive” signal back through the DAS path to a central Neuron gateway located in the equipment room. This process verifies the infrastructure's continuity, regardless of the carried technology or operational bands. The Neuron express came to be the perfect choice for medium-to-large venues specially when very fast reporting interval is needed (starting from 3 minutes).

Versatility

- Vendor agnostic system with generic non-Intrusive Probes
- Band independent Beacon-based concept
- Extended Range up to 55 dB DAS path from antenna to gateway
- Flexible Monitoring either through cloud server, dry-contact, SNMP or direct onsite access



Gateway Specifications

Parameter	Standard Express Gateway	Rack Mounted Gateway /Aggregator
Model #	Neuron-GW-EXP	Neuron-GW-EXP-Pack19
Main Use Case	Reporting Neuron Status	Reporting Neuron and external elements
RX connection	900 MHz ISM band (Other bands available)	900 MHz ISM band (Other bands available)
Max. Test Range	> 55 dB through the DAS Path	> 55 dB through the DAS Path
No. of Probes/Gateway	>100 (combining multiple groups of 100 probe each is available)	>100 (combining multiple groups of 100 probe each is available)
Reporting Interval	≥3 minutes (User configurable)	≥3 minutes (User configurable)
Server connectivity	Ethernet (Optional WIFI or Cellular)	Ethernet (Optional WIFI or Cellular)
Optional Interfaces	SNMP (V2C) and/or Dry-contact (form C)	SNMP (V2C) and/or Dry-contact (form C)
RF connectivity	Using included directional coupler (or directly from the combiner matrix)	Using included directional coupler (or directly from the combiner matrix)
Dry contact Output	1 × Form C (Optional)	1 × Form C (Optional)
Dry contact input	-	16 dry-contact input aggregator (2×8 Euroblock terminals)
Power Supply	24/48 VDC; connector 5.5 × 2.1 mm, incl. AC/DC adapter 100-240 VAC.	24/48 VDC; connector 5.5 × 2.1 mm, incl. AC/DC adapter 100-240 VAC.
Power Consumption	<15 Watts	<20 Watts
RF Port	N-type female	N-type female
Enclosure	Aluminum	Aluminum
Ingress Protection	IP64 (Optional IP67)	IP30
Mounting	Wall Mount (Using screws)	Rack mounted
Operating Temp.	14 to 122 °F (-10 to 50 °C)	14 to 122 °F (-10 to 50 °C)
Weight	3.3 lbs (1.5 Kg)	7.7 lbs (3.5 Kg)
Size	6.5" X 6" X 2.8" (165 X 150 X 70 mm)	19" X 11.5" X 3.5" (48 X 29 X 8.8 cm)

Directional Coupler Specs.

	Standard	VHF
Model #	Neuron-GW-DIR327-10	Neuron-GW-DIR196-10
Frequency Range	350 to 2700 MHz	138 to 960 MHz
Insertion Loss	Typ. 0.6 dB @ 900 MHz	Typ. 0.9 dB @ 900 MHz
Coupling	10 dB	10 dB
Directivity	30 dB @ 900 MHz	19 dB @ 900 MHz
Connector	N-type female	N-type female
Power Handling	>200 Watts	>200 Watts
Dimensions	9"X2.7"X1.1" (23X7X3 mm)	14"X1.6"X0.8" (344X40X19 mm)



Ordering Information

(Refer to main Neuron Express datasheet or your sales rep. for full ordering information)

Description	Model
Neuron Gateway: Receiver unit for Neuron Express packet checks	Neuron-GW-Exp-P90dc-v/10
19" rack-mounted Neuron Gateway & dry-contact hub (16 X in).	Neuron-GW-Exp-Pack19d/10
19" rack-mounted Neuron Gateway & dry-contact hub (16 X in). Supports VHF Signals	Neuron-GW-Exp-Pack19v/10