Storm front distance sensor



- The sensor measures the distance between itself and storm front
- Reading of electromagnetic emission from the lightning sparks (typically at 400 kHz)
- It detects electrical emissions from lightning activity and then provides an estimation of the distance to the head of the storm, from 40 km away down to 5 km
- It detects cloud flashes to ground and intra-cloud (cloud to cloud) activities

Detection of the storm front distance (not lightning strike intensity) within an area of in 5...40 km range. Utilizing a sensitive RF receiver and integrated proprietary algorithm, the DQA601.1-601A.3 detect the electrical emissions from lightning activity and then provide an estimation of the distance to the head of the storm from 40 km away, while rejecting disturbances from manmade signals such as motors and microwave ovens. The estimated distance does not represent the distance to the single lightning but the estimated distance to the leading edge of the storm.

Technical Specifications

Order numb.	DQA601.1	DQA601A.3
Output	RS232	TTL-UART
Compatibility	Alpha-Log	MSB
Connector	DB9-DTE	Free wires

Common Technical Specifications

	Range	5...40 km
	Resolution	14 steps (5, 6, 8, 10, 12, 14, 17, 20, 24, 27, 31, 34, 37, 40 km)
	Output	RS232
	Protocol	ASCII
	Filter	Disturber rejection algorithm & auto antenna tuning
	Power supply	5...24 V DC
	Power consumption	Max 350 µA
	Operative Temperature	-40...85 °C
	Cable	L=10 m + connector
	EMC	EN 61326-1: 2013
	Protection rate	IP66
	Installation	• TYA200 support and TYA050 mounting arm • DYA046 bar

Accessories

	**TYA050**	Tubular rod Ø22 sp. 15/10 L 500 mm
	**TYA200**	Sliding sensor support



The storm front distance sensor is particularly suitable to be connected to Alpha-Log data-logger and mounted on the DYA046 bar (see figure) or fixed on the TYA200 support and TYA050 mounting arm, to complete an early warning solution.

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