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5P47 - Modular, High-Frequency, High-Voltage Inductive Adders

Friday 28 June 2019 13:30 (1h 30m)

Eagle Harbor Technologies, Inc. (EHT) has developed an inductive adder for driving nonlinear transmission lines (NLTLs). This inductive adder is composed of three modules, each with eight printed circuit boards. This modular approach allows systems to be easily configured for 12, 24, or 36 kV outputs. This 36 kV inductive adder can drive 50-ohm loads with fast rise times (sub-10 ns) and adjustable pulse widths (30 - 120 ns) at high pulse repetition frequency (up to 22 kHz CW or 50 kHz for short bursts). EHT will present details of the inductive adder construction and output as well as the development of the high voltage cable used to connect the inductive adder to the load.

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