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Theoretical and Experimental Studies of Off-the-Shelf V-dot Sensors

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Initially this paper will outline a theoretical study, using commercially available software CST, into the use of off-the-shelf V-dot sensors made from N and SMA type adaptors and connectors. A complex issue arising from the distortion of the signal measured within a pulse forming line when the sensor is mounted close to a spark gap will be clarified.

Other issues relating to calibration of the sensors will then be discussed and calibration techniques presented that employ a number of different high-frequency arrangements. Finally, typical case studies will be described and conclusions drawn.

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