



# ABACUS®

## ABACUS A9U ANSI Type 2 Optical Communication Probe



TransData's Abacus A9U ANSI Optical Probes utilize infra-red LED technology to provide an optically isolated, bi-directional communications link between computers and ANSI electric meters for obtaining meter data, performing site diagnostics and programming changes. Abacus Optical Probes are renowned for their superior reliability and capability of interfacing with the widest variety of ANSI electric meters. TransData's Abacus A9U Optical Probes are fully Windows 10 compliant.

The Abacus A9U Optical Probe features a standard USB Type-A computer interface and a magnetized head that attaches to the metal "D" ring on ANSI electric meters. The Abacus A9U head contains precision engineered circuitry that converts electrical signals to infra-red light signals that are transmitted and received thru the electric meter cover to a set of infra-red LED's located inside the electric meter as specified in ANSI C12.18-1996 (U.S.A.) and AS 1284.10.2-1993 (Australia). The A9U's ABS plastic head provides galvanic isolation to protect users from electrical surges when connecting to hard-wired optical ports and accidental contact with live potential wiring in meter cabinets.

The Abacus A9U uses "virtual serial port drivers" obtained via the Windows 10 update feature that enables use with Windows application software that expects the optical probe to be connected to a conventional RS232 serial port. For use with brands of electric meters that don't comply with ANSI C12.18 Data Terminal Ready (DTR) polarity requirements, the Abacus A9U allows using the virtual serial port signal as a DTR polarity switch to change the signal polarity.

<u>Model Number</u>	<u>Description</u>
A9U-P-U04M-2A	6 Foot Cable
A9U-P-U04M-3A	10 Foot Cable
A9U-P-U04M-5A	15 Foot Cable



### Specifications

USB Interface	USB Type 1.1; 2.0 and 3.0 Compliant
Power Supply	Non Required, Powered by Host PC
Cable	Dual Shielded PVC with Gold Plated Contacts
PC Interface Connector	USB Type-A Male Plug
Maximum Data Rate	57.600 bits/second
Virtual Serial Port DTR Switching	DTR Negative is Standard Mode for ANSI C12.18-2006 Compliant Meters
	DTR Positive is Alternate Mode for Non-ANSI C12.18-2006 Compliant Meters
Fastening	Magnetic Coupling to Meter D Ring
Mechanical	High Impact ABS
Software	Compatible with Windows 10 32/64 bit, 7, 8, 8.1, Vista and XP

### ***Use Windows 10 Update Feature to Install ABACUS Optical Probe Drivers***

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