

Using the Ethernet option with the A3 ALPHA® meter and A3 ALPHA meter/collector

General

The Elster advanced communication option board (ACB) provides various protocol options to the A3 ALPHA meter, including C12.21, Modbus, DNP 3.0, and Ethernet. When used for Ethernet connectivity, the ACB provides communication at 10 megabits per second over a twisted wire pair (10BaseT). Also, the ACB Ethernet option board may be programmed to initiate a connection to a remote host when certain alarm conditions exist within the meter (C12.21 only).

For more information about the A3 ALPHA meter, see the A3 ALPHA Meter Technical Manual (TM42-2190A or later). For more information about the A3 ALPHA meter/collector, see the A3 ALPHA Meter/Collector Product Guide (PG42-1005B or later).

⚠ WARNING

Use authorized utility procedures to install and service metering equipment. Dangerous voltages are present. Equipment damage, personal injury, and death can result if safety precautions are not followed.

Use circuit closing devices on current transformer secondaries. Dangerous currents and voltages are present. Equipment damage, personal injury, and death can result if circuit closing devices are not used.

Ethernet ACB Option Board

The Ethernet ACB option board is a single board design providing a cable connector for a standard TIA/EIA-568-B connection (RJ-45). The Ethernet ACB option board always mounts directly to the main circuit board of the A3 ALPHA meter using the 20-pin connector (J4) as shown in Figure 1. In the A3 ALPHA meter/collector, the ILC1 option board mounts on the Ethernet ACB option board (see Figure 2).

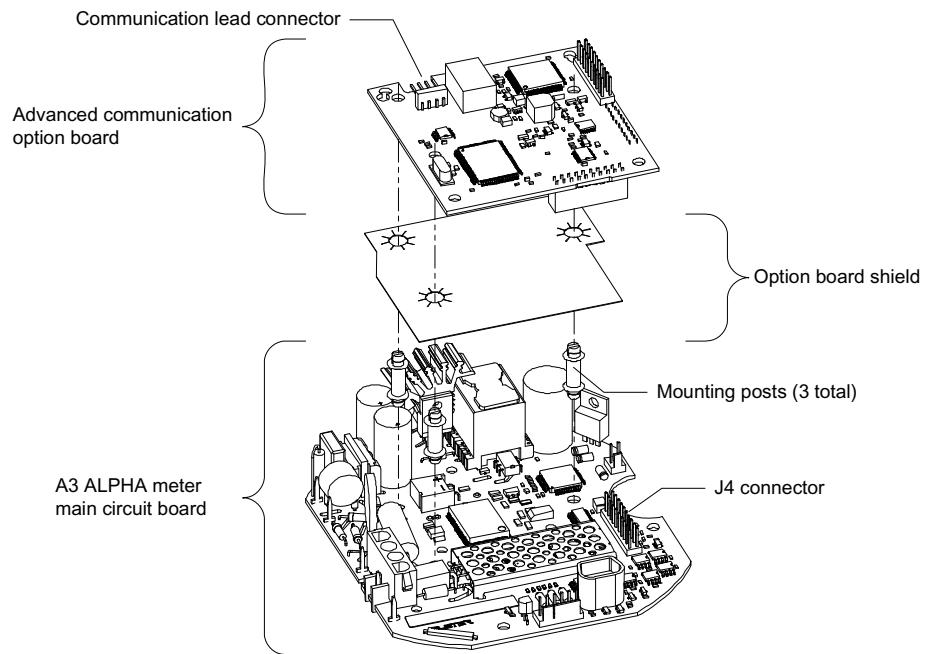


Figure 1. A3 ALPHA meter with Ethernet ACB option board

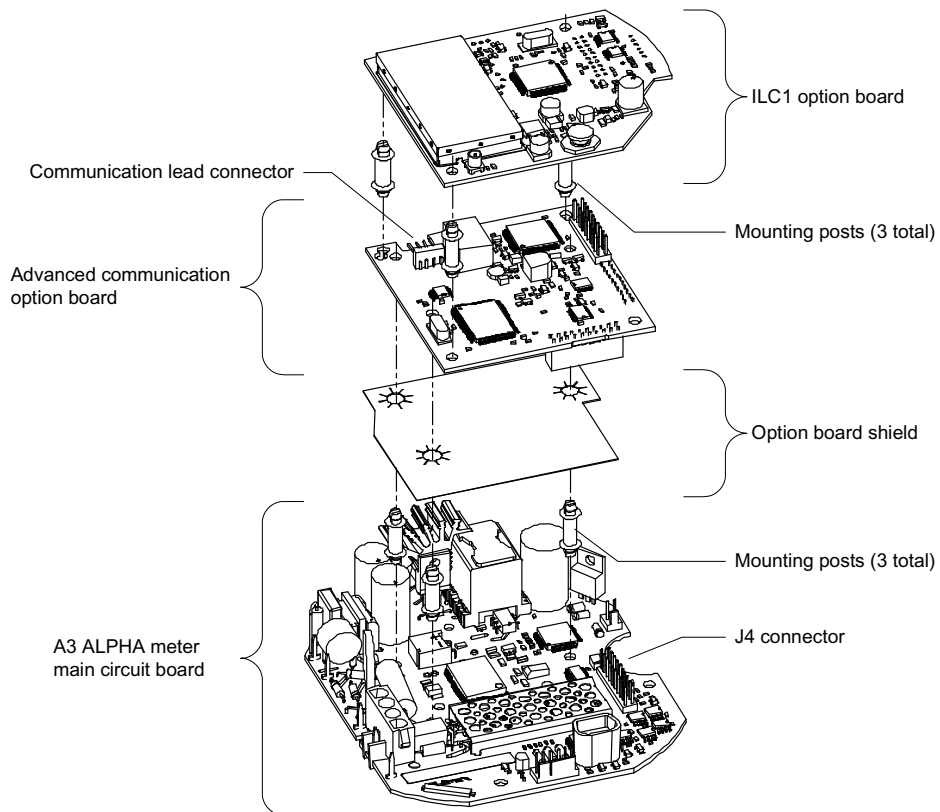


Figure 2. A3 ALPHA meter/collector with Ethernet ACB option board

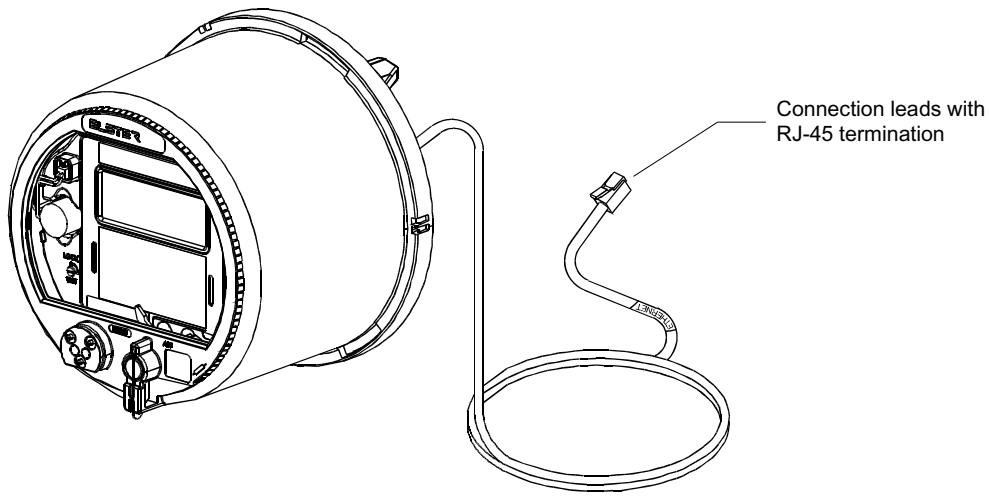


Figure 3. Meter with Ethernet cable

RJ-45 connectivity		
TIA/EIA-568-B		Color
Pin	Signal	
1	Transmit+	White/orange
2	Transmit-	Orange
3	Receive+	White/green
4	NC	Blue
5	NC	White/blue
6	Receive-	Green
7	NC	White/brown
8	NC	Brown

Programming

To access over a network, the A3 ALPHA meter and Ethernet ACB option board must be programmed with several parameters such as IP address, subnet mask, default gateway, etc., using the latest Elster meter support software. For information on programming the A3 ALPHA meter and Ethernet ACB option board, refer to the documentation or online Help for Elster's meter support software.

Notes

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