

## Ultralink to Ultrawire Cross-Over (XTU011)



The XTU Downhole Controller is a communications interface between logging tools operating on the Ultrawire toolbus and Ultralink telemetry system.

The XTU is an intelligent bridge between the Ultrawire toolbus and Ultralink telemetry system; acting as both a communications interface and a programmable logging controller. It also incorporates a DC-DC converter (switch mode power supply) to convert the high voltage on the Ultralink line to power the Ultrawire toolbus. In its capacity as a logging controller, the XTU polls each tool in the tool string for its data packet, assembling all packets into data frames for transmission to the surface acquisition system. By default, the polling program is automatically generated and executed by the XTU, making logging a very simple process. The polling program can be modified by the logging engineer.

### Features

- Automatic “plug and play” configuration and start-up
- Selectable Ultralink bit rate to suit varying demands and conditions
- Detailed toolbus error detection and logging to facilitate fault finding
- Facility to monitor the head voltage and internal temperature of the XTU
- Automatic transmission of the tool string configuration to the surface system
- Automatic downlink failure detection triggers reversion to default bit rate
- Automatic generation of a default polling program that enables all the identified tools to share the available bandwidth on the wireline

### Specifications

MODEL	XTU011
Temperature rating	350°F (177°C)
Pressure rating	20,000 psi (137.9 MPa)
Tool diameter	1 11/16 in. (43 mm)
Tool length	18.5 in. (471.0 mm)
Tool weight	7.5 lb (3.4 kg)
Supply voltage	+180 to +400V DC
Supply current (depends on tool string)	20 mA (no load)
Max. number of tools supported	62
Ultrawire toolbus data rate	500 kbits/s
Ultrawire toolbus current (max)	1A at 350°F (177°C) 1.5A at ambient temperature
Ultralink uplink data rates	50, 71, 100 & 143 kbits/s
Ultralink downlink rate	300 bits/s
Upper connection	13/16 UNF female thread with 4 mm single socket (GO joint)
Lower connection	13/16 UNF male thread with 4 mm single socket (SX joint)
Materials	Corrosion resistant throughout



imagination at work

Visit us online at:  
[www.geoilandgas.com](http://www.geoilandgas.com)

Copyright ©2015 General Electric Company. All rights reserved.