**MODBUS RTU SETUP FOR TECO ALTIVAR 320 DRIVES**

To set up Modbus RTU on an [Altivar 320](https://www.google.com/search?cs=1&sca_esv=01d7d1da4f3739f4&sxsrf=AE3TifMn6bQe23HUSBWoPdwKpxis0AF8Fg%3A1757584406690&q=Altivar+320&sa=X&ved=2ahUKEwjpodmRuNCPAxUltIkEHRcaIuoQxccNegQIAhAB&mstk=AUtExfAaFMtkWkWc8IfEDlqBMEzLFxME96TEBSP81Lrdmr7a49_j0c4XAIEigRu8ai4IW3FAkYzE68CFviimvHXAHCUCnHRplOlXoY__1adZYk65-qlZSkVcnHaF6i-etjww90Vc8SurHa4BqP2exggo0VKLoxLtBiOQH3zlDpytBoadIQyW5RyYeDXjPeaBr5u_bmJASNDNuX49A2FglhU3OgWxxHNxVrq_eHum98uydRktKAEP_8CTlVOR3_m-OXIjlVpWn3g1KVNMObylnzZ8wAm_eh76Xdh9IXt9iOvmpRF2tw&csui=3" \t "_blank) (ATV320), you must configure parameters in the drive's menu tree (CONF, FULL, CON- menu) to define the [Modbus address](https://www.google.com/search?cs=1&sca_esv=01d7d1da4f3739f4&sxsrf=AE3TifMn6bQe23HUSBWoPdwKpxis0AF8Fg%3A1757584406690&q=Modbus+address&sa=X&ved=2ahUKEwjpodmRuNCPAxUltIkEHRcaIuoQxccNegQIAhAC&mstk=AUtExfAaFMtkWkWc8IfEDlqBMEzLFxME96TEBSP81Lrdmr7a49_j0c4XAIEigRu8ai4IW3FAkYzE68CFviimvHXAHCUCnHRplOlXoY__1adZYk65-qlZSkVcnHaF6i-etjww90Vc8SurHa4BqP2exggo0VKLoxLtBiOQH3zlDpytBoadIQyW5RyYeDXjPeaBr5u_bmJASNDNuX49A2FglhU3OgWxxHNxVrq_eHum98uydRktKAEP_8CTlVOR3_m-OXIjlVpWn3g1KVNMObylnzZ8wAm_eh76Xdh9IXt9iOvmpRF2tw&csui=3), [baud rate](https://www.google.com/search?cs=1&sca_esv=01d7d1da4f3739f4&sxsrf=AE3TifMn6bQe23HUSBWoPdwKpxis0AF8Fg%3A1757584406690&q=baud+rate&sa=X&ved=2ahUKEwjpodmRuNCPAxUltIkEHRcaIuoQxccNegQIAhAD&mstk=AUtExfAaFMtkWkWc8IfEDlqBMEzLFxME96TEBSP81Lrdmr7a49_j0c4XAIEigRu8ai4IW3FAkYzE68CFviimvHXAHCUCnHRplOlXoY__1adZYk65-qlZSkVcnHaF6i-etjww90Vc8SurHa4BqP2exggo0VKLoxLtBiOQH3zlDpytBoadIQyW5RyYeDXjPeaBr5u_bmJASNDNuX49A2FglhU3OgWxxHNxVrq_eHum98uydRktKAEP_8CTlVOR3_m-OXIjlVpWn3g1KVNMObylnzZ8wAm_eh76Xdh9IXt9iOvmpRF2tw&csui=3) (tbr), data format (tFO), and then set the [command (CD1)](https://www.google.com/search?cs=1&sca_esv=01d7d1da4f3739f4&sxsrf=AE3TifMn6bQe23HUSBWoPdwKpxis0AF8Fg%3A1757584406690&q=command+%28CD1%29&sa=X&ved=2ahUKEwjpodmRuNCPAxUltIkEHRcaIuoQxccNegQIAhAE&mstk=AUtExfAaFMtkWkWc8IfEDlqBMEzLFxME96TEBSP81Lrdmr7a49_j0c4XAIEigRu8ai4IW3FAkYzE68CFviimvHXAHCUCnHRplOlXoY__1adZYk65-qlZSkVcnHaF6i-etjww90Vc8SurHa4BqP2exggo0VKLoxLtBiOQH3zlDpytBoadIQyW5RyYeDXjPeaBr5u_bmJASNDNuX49A2FglhU3OgWxxHNxVrq_eHum98uydRktKAEP_8CTlVOR3_m-OXIjlVpWn3g1KVNMObylnzZ8wAm_eh76Xdh9IXt9iOvmpRF2tw&csui=3) and [reference (FR1)](https://www.google.com/search?cs=1&sca_esv=01d7d1da4f3739f4&sxsrf=AE3TifMn6bQe23HUSBWoPdwKpxis0AF8Fg%3A1757584406690&q=reference+%28FR1%29&sa=X&ved=2ahUKEwjpodmRuNCPAxUltIkEHRcaIuoQxccNegQIAhAF&mstk=AUtExfAaFMtkWkWc8IfEDlqBMEzLFxME96TEBSP81Lrdmr7a49_j0c4XAIEigRu8ai4IW3FAkYzE68CFviimvHXAHCUCnHRplOlXoY__1adZYk65-qlZSkVcnHaF6i-etjww90Vc8SurHa4BqP2exggo0VKLoxLtBiOQH3zlDpytBoadIQyW5RyYeDXjPeaBr5u_bmJASNDNuX49A2FglhU3OgWxxHNxVrq_eHum98uydRktKAEP_8CTlVOR3_m-OXIjlVpWn3g1KVNMObylnzZ8wAm_eh76Xdh9IXt9iOvmpRF2tw&csui=3) channels to MDB (Modbus). After changing these settings, you need to cycle the ATV320's power to save the configuration.

Here are the step-by-step instructions for setting up Modbus RTU on an ATV320:

1. **1. Access the Configuration Menu:**
   * Press the Menu button, navigate to CONF, then select FULL for full access, and then go to the CON- menu.
2. **2. Set the Modbus Address:**
   * Find the parameter for the Modbus address and set it to a unique value for the drive within the network (e.g., address 1 is the default).
3. **3. Configure the Transmission Speed (Baud Rate):**
   * Locate the tbr parameter and select the desired baud rate from the options available (e.g., 4.8, 9.6, 19.2, or 38.4 kbps).
4. **4. Set the Data Format:**
   * Find the tFO parameter and choose the appropriate data format. Common options include:
     + **8n1: 8 data bits, no parity, 1 stop bit.**
     + **8E1:** 8 data bits, even parity, 1 stop bit.
     + **8O1:** 8 data bits, odd parity, 1 stop bit.
5. **5. Configure the Communication Channels:**
   * Navigate to the CTL (Control) menu.
   * Set CD1 to MDB to use Modbus for the command channel.
   * Set FR1 to MDB to use Modbus for the reference channel.
   * Configure CHCF (profile) according to your system's needs (e.g., separate, not separate, or I/O mode).
6. **6. Save the Configuration:**
   * After making all the necessary changes, power off the ATV320 and then power it on again to save and activate the new Modbus settings.