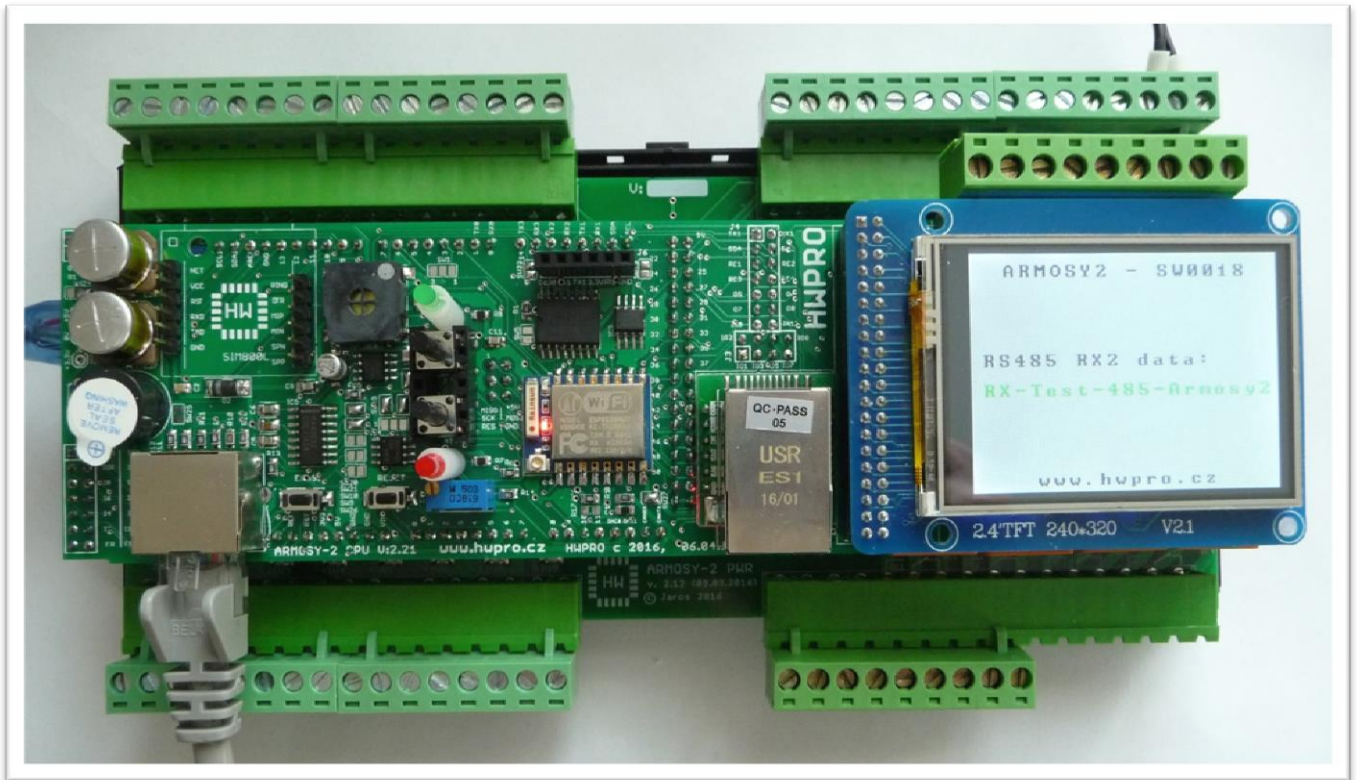


# Example – SW0018

Receiver data RS-485 => UART2, View TFT, 115k



Universal Control System		ARMOSY-2		ARduino MOdule SYstem		
<b>ARM, 32 bit</b>  84MHz, 512k FLASH	<b>Arduino DUE</b>  3.3V Technology	<b>EEPROM, I2C</b>  256 kB	<b>RTC, DS3231, I2C temper.compensation</b>  Battery CR2032	<b>SD CARD, SPI</b>  Slot In TFT LCD	<b>2.4" COLOR LCD</b>  240x320 px	<b>NF amplifier, DAC</b>  Audio
<b>2x</b> <b>RS-232</b> 115 kbps	<b>Two Wire</b> <b>RS-485</b> 115 kbps	<b>OPTION</b> <b>Mini USB, FTB232</b> <b>USB</b> 1 Mbps	<b>OPTION</b> <b>ESP8266, UART</b> <b>WiFi</b> 2 Mbps	<b>OPTION</b> <b>W5500, SPI</b> <b>Ethernet</b> 10/100 Mb, 2 LED	<b>OPTION</b> <b>GSM, UART</b> <b>GSM</b> SIM800L	<b>Two I2C BUS</b>  1Wire BUS
<b>8x</b> <b>INPUT</b> Optocoupler 6 MODE	<b>8x</b> <b>OUTPUT</b> Optocoupler 3 MODE, PWM	<b>8x</b> <b>IN / OUT</b> Universal I/O Direct CPU	<b>OPTION</b> <b>2x</b> <b>0 – 30A</b> Current measurement	<b>OPTION</b> <b>4x AD</b> <b>0 – 10V</b> 18b AD Converter	<b>OPTION</b> <b>4x DA</b> <b>0 – 10V</b> 12b DA Converter	<b>OPTION</b> <b>4x</b>  10A, 250V, AC
<b>POWER INPUT</b> 8V ~ 72V, 3W  AC, DC, USB	<b>Measurement</b> Systém Voltage  3.3V / 5V	<b>OTHERS</b> 2x Buttons 2 x LED Buzzer	<b>User Design PCB</b>  Size 10x4 cm	<b>DIN</b>  12 modul	<b>Programming</b>  Free Software	<b>CZ, EN</b>  User manual Examples

```

/* ||||| ARMosY-2 Example |||||
Receiver data RS-485 => UART2, View TFT, 115k
Hardware: ARMOSY-2
Version HW: 2.21
Create: 24.04.2016

||||| TERMINAL CONNECTION |||||
63 - IN POWER, VCC min 8V/1A!
64 - IN POWER, "-"
74 - RS-485, 1(TX2),2(RX2), Terminal 115200 8N1

||||| JUMPER |||||
SW7 - ON (Enable TX RS485)
SW19 - ON (Enable RX RS485)
Disconnect SIM800L
*/

// | LIBRARY
#include <UTFT.h> //Driver UTFT

// | DECLARATIONS
UTFT myGLCD(ITDB24,38,39,40,41); // RS, WR, CS, REST
extern uint8_t BigFont[]; // UTFT Fonds
String command; //String to hold commands
#define RS485 Serial2 // USB
byte RS485_DERE = 41; // RX/TX RS485

// ||||| SETUP |||||

void setup() {

// | UTFT
myGLCD.InitLCD(); // Initialization LCD
myGLCD.clrScr(); // Clear Screen
myGLCD.fillScr(VGA_WHITE); // VGA Background Transparency
myGLCD.setColor(0, 0, 0); // Black Fonds
myGLCD.setBackColor(255, 255, 255); // White Background
myGLCD.setFont(BigFont); // Select Font

// | HEADER
myGLCD.print("ARMOSY2 - SW0018", CENTER, 10);
myGLCD.print("www.hwpro.cz", CENTER, 220);
myGLCD.print("RS485 RX2 data:", 10, 100);

// | SERIAL UART
Serial2.begin(115200); // Speed UART1

// | RS485 SWITCH RX/TX
pinMode(RS485_DERE, OUTPUT);
digitalWrite(RS485_DERE, LOW); // L RX Enable, H TX Enable
}

```

```
// ||| MAIN |||

void loop() {

  while(RS485.available()>0) // RX data RS485
  if(RS485.available()>0)
  {
    char c = RS485.read(); // c <= RS485
    if(c == '\n')
    {
      ParseCmd(command);
      command = "";
    }
    else if (c != '\r')command += c;
  }
}

// Read command
void ParseCmd(String com)
{
  String cmd = com.substring(com.indexOf(":")+1); // cmd <= serial:
  myGLCD.setColor(0, 255, 0); // Green Fonds
  myGLCD.print(cmd, 10, 130); // Print UTFT
}
}
```

