

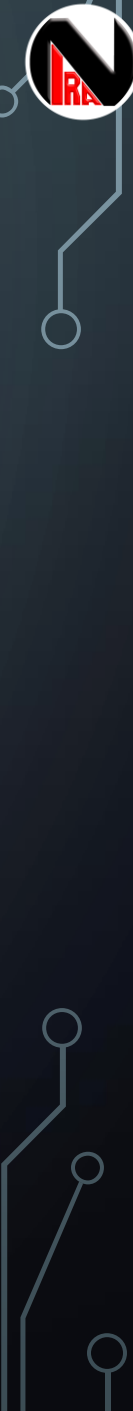


مرکز آموزش نیرا سیستم

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# Framing

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# Introduction

- ASCII
  - Text
  - 0 ~ 127 valid value per byte
- Binary
  - Raw data
  - All values valid



# ASCII (Text)

- `<SOF><Data><EOF>`
  - Ex: `<CR><LF><DATA><CR><LF>` => AT Command
  - Ex: `<$><Data><CR><LF>` => NMEA
  - Ex: `<:><Data><CR><LF>` => ModBus-ASCII
- `<Data><EOF>`
  - Ex: `<Data><CR><LF>` => Line, AT Command
- CR = Carriage Return = `'\r'` = 0x0D
- LF = Line Feed = `'\n'` = 0x0A



# Binary (Raw)

- `<SOF><Data><EOF>`
  - `<Silent><Data><Silent> => ModBus-RTU`
- `<SOF><Data>`
  - Ex: `<0xB5><0x62><Data> => UBX`