



# EDGE-50 TCP/IP UHF Reader

The EDGE-50 TCP/IP is a RFID UHF Reader with small dimensions and great performance. It is based on the module M6e, which allows up to 4 mono-static antennas and custom software development using a free SDK available in C, .NET and Java. It communicates via Ethernet TCP/IP and/or USB.

Purchase Code: 100.255

EDGE-50 TCP/IP READER	
<b>Transponder Protocols</b>	
Protocols	ARTEFATO PA SJ5511 v.1.0 <sup>1</sup> SINIAV G0 v.1.0.0 <sup>1</sup> BRASIL-ID P63 <sup>1</sup> EPC Gen2 (ISO 18000-6C) ISO 18000-6B
<b>Custom commands implemented</b>	
Artefato PA SJ5511 Protocol	Activate_Secure_Mode Authenticate_OBU
Siniav G0 Protocol	Activate_SINIAV_Mode OBU_Auth_ID OBU_Auth_Full_Pass1 OBU_Auth_Full_Pass2 OBU_Auth_Full_Pass (Pass1 + Pass2) OBU_ReadFromMemMap OBU_WriteToMemMap
Brasil-ID P63 Protocol	ReadSec WriteSec
EPC Gen2 (ISO 18000-6C)	Todos os comandos obrigatórios (Read, Write, Lock, ReadMemBlock, WriteMemBlock, etc)
<b>RF Interface</b>	
RF Power Output	Separate read and write levels, command adjustable from 5 to 30 dBm (1W) with $\pm 0.5$ dBm accuracy above +15 dBm <sup>2</sup>
Regulatory	Pre-configured for the following regions: ANATEL (BR) 902 - 907 MHz e 915 - 928 MHz FCC (NA) 902 - 928 MHz ETSI (EU, IN) 865,6 - 867,6 MHz
Mode	Frequency Hopping or Fixed Frequency (Configurable frequency hoptable)
RF Modulation	PR-ASK
RF Encoding	FM0, Miller M2, M4 e M8
Backscatter Link Frequency (BLF)	250 kHz, 320 kHz e 640 kHz
<b>Performance</b>	
Max Read Rate	Up to 750 tags/second using high-performance settings
Max Tag Read distance	Over 30 feet (9 m) with 12.5dBi antenna (36dBm EIRP) <sup>3</sup>
<b>Control / Data Interface</b>	
Connectors	<b>Power</b> Power Jack 2,5 mm <b>Communication</b> RJ45 and USB Mini B <b>Antenna</b> TNC 50 $\Omega$ connector

Data Communication	<b>USB Serial:</b> Type 2.0 Up to 12 Mbps Driver for Windows, Linux does not require driver. <b>Ethernet:</b> Data rate: 10/100Mbps 1.5 KVAC isolated IEEE 802.3 Standard
API support	C#.Net, Java, C (Include samples, source codes and Demo Software)
<b>Power</b>	
DC Power required	DC Voltage: 24VDC $\pm$ 10% Max Ripple: 200mVpp
DC power consumption @ RF level	Max 15W @ 30dBm With maximum duty cycle
<b>Mechanical / Environmental</b>	
Water Tightness	IP40 (indoor use only)
Dimensions	125 x 125 x 52 mm [L x W x H]
Weight	450g $\pm$ 10g
Operational temperature	-10°C to + 65°C
Storage temperature	-10°C to + 70°C
Humidity	95%
Mounting	Four 4.5mm holes on the side flaps

<sup>1</sup> Brazil standards for tolling and suply chain applications.  
<sup>2</sup> Maximum power may have to be reduced to meet regulatory limits, which specify the combined effect of the module, antenna, cable, etc.  
<sup>3</sup> Read distance may vary depending of Tag, antenna and environmental conditions.

