GPIB-TO-LAN CONVERTER

Integration of instruments with an Ethernet interface, such as the R&S®OSP open switch and control platform, into a pure GPIB bus system

Your requirement

For some time now, new measuring instruments are equipped with an Ethernet connection. Many also come with the conventional GPIB interface. But increasingly, instruments are being offered without a GPIB interface.

Users of pure GPIB bus systems are confronted with the problem that these instruments, such as the R&S®OSP open switch and control platform, cannot be integrated into an existing system.
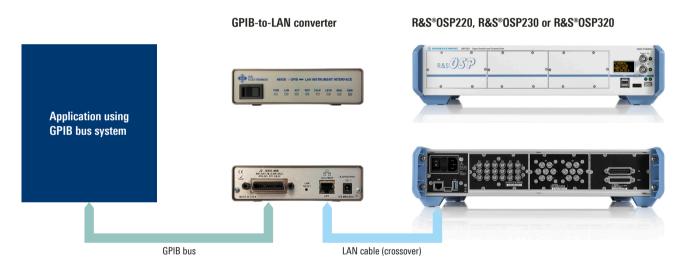
Rohde & Schwarz solution

The GPIB-to-LAN converter from ICS Electronics makes it easy to integrate the R&S®OSP, or other instruments that only have an Ethernet interface, into an existing GPIB bus system.

Via LAN, any web browser can be used to configure the GPIB-to-LAN converter. No special software or driver is needed after configuration.

A general prerequisite is that the VXI-11 protocol can be used, e.g. for LXI instruments.

Connecting the R&S®OSP to a GPIB bus system with a GPIB-to-LAN converter

GPIB-to-LAN converter   R&S®OSP220, R&S®OSP230 or R&S®OSP320

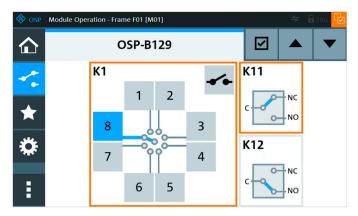GPIB bus   LAN cable (crossover)

ROHDE & SCHWARZ

Make ideas real

Application

The base units of the R&S®OSP220, R&S®OSP230 and R&S®OSP320 open switch and control platform only have the state-of-the-art Ethernet interface. For integration into older systems that use the GPIB bus, the converter is an ideal way to connect the R&S®OSP open switch and control platform and other measuring instruments with Ethernet interface.
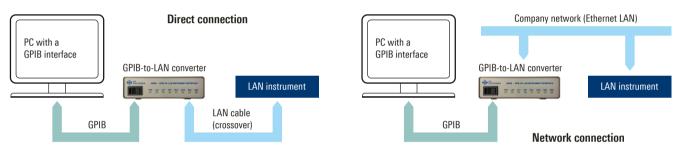
The following steps are necessary:
► Connect the converter to a Windows PC with an Ethernet interface to configure it (for instance, GPIB and TCP/IP address)
► Set up the configuration and, if necessary, adjust the software (for example, delay time)

The R&S®OSP instruments can be controlled and configured via Ethernet using the web GUI or SCPI commands. Alternatively, they can be controlled via the GPIB-to-LAN converter using SCPI commands.

See also
GPIB-to-LAN converter documentation

General GPIB-to-LAN converter applications

Direct connection

PC with a GPIB interface — GPIB-to-LAN converter — LAN instrument
GPIB — LAN cable (crossover)

Network connection

Company network (Ethernet LAN)
PC with a GPIB interface — GPIB-to-LAN converter — LAN instrument
GPIB

Specifications

Specifications		
Transmission rates	GPIB to converter converter to GPIB	> 260 kbyte/s > 180 kbyte/s
Command times	*IDN? query	typ. 17 ms (VXI-11 protocol) typ. 3 ms (raw socket)
	*CLS command	typ. 8.5 ms
Ethernet, type IP address		IEEE 802.3 static or DHCP (AutoIP)
Data rate (gross)	10BASE-T 100BASE-T	10 Mbit/s 100 Mbit/s
Temperature	operating temperature range storage temperature range	–10 °C to +65 °C –40 °C to +70 °C
Relative humidity		0 % to 90 %, noncondensing
Dimensions	W × H × D	142 mm × 39 mm × 190 mm (5.57 in × 1.52 in × 7.45 in)
Weight		0.73 kg (1.61 lb)

Ordering information

Designation	Type	Order No.
GPIB-to-LAN converter (converter, crossover LAN cable, power supply 110 V to 240 V, documentation, CD)	R&S®GPIB-LAN-C	1505.4686.03

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