

Broadcast TLC2000-T Telemetry and Changeover Owner's Manual

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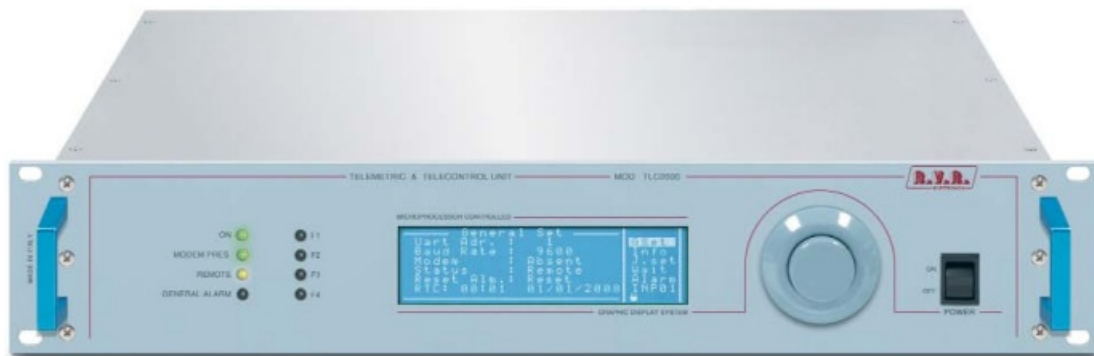
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telemetry & changeover

**TLC 300/T2
TLC2000/T....
RDMODSER-FM
RDMODGSM-FM**



TLC2000 front view

Features

- **PRIMARY APPLICATION:** RVR telemetry systems allow for an immediate intervention in case of fault, thanks to the radio station remote control. Equipment great flexibility makes it possible to control a high number of devices or to modify the station layout. This operation does not involve any radical changes of the control system, it is simply a matter of adding expansion boards that will increase the number of operating parameters the system can manage.
- **TELEMETRY FEATURES:** all RVR telemetry devices control and program the alarms, send/receive text

messages (SMS), connect to external/internal GSM and PSTN modems, and use the telecon control software designed by **RVR**.

The various functions, technical data and the available product versions are detailed in the following sections of this catalogue about functional specifications, technical specifications and product versions.

- **HARDWARE FEATURES:** all **RVR** telemetry systems are housed in lightweight and rugged stainless steel rack cases having the dimension of 1 HE or 2 HE.
- **USER-FRIENDLY FEATURES:** the front panel features many leds that indicate instant system status to the operator.

In model **TLC2000** the user-friendly HMI with graphic display ensures prompt reading and setting up of all operating parameters. It is possible to control and vary any system setting through a simple knob (encoder).

- **EASE OF MAINTENANCE:** all **RVR** telemetry systems are assembled using modules and boards with connectors so that it is easy to remove, replace and add modules and boards.
- **RELIABILITY/CONTINUITY:** **TLC 2000** and **TLC300** telemetry systems feature 24 V power connector that could be used in case of mains power failure.

RDMODSER or GSM products are battery-powered.

- **INTERFACE CONTROL:** the rear panel features all connectors that could be used to connect the equipment to the various station components. (see technical specifications section). Although our telemetry systems are designed to communicate in the best way possible with all **RVR** equipment, they can also interface with the equipment of other manufacturers, as far as their main operating parameters are output via analogue signals with value between 0 and +5V.

The Telecon software used for remotely controlling the equipment is one of the most comprehensive and powerful systems on the market and, yet, it features a user-friendly HMI.

Telecon developed by **RVR Elettronica** is fully compatible with any WINDOWS™ operating system.

- **REGULATORY COMPLIANCE:** all **RVR** telemetry systems comply with EC, FCC and CCIR standards.

Telemetry unit



1. TLC300/T2 front view
2. RDMODGSM-FM front view

TCP INT-PTX-16
TCP INT-DDS
TCP INT-TEX
TEL INK-C1
TEL INK-SNMP2



TCP-IP Interface



TELINK-C1 Interface

Features

TCP-IP

Allows the telemetry of **RVR** equipments remotely, through internet network, or a local LAN network in standard **TCP/IP** protocol.

Allows the reading of equipment values linked to the interface through a common PC's browser (HTTP).

Can receive start and stop commands and send alarms by e-mail (SMTP).

Built-in a powerful 16bit DSP Bit of 52MIPS to control all advanced features.

The **TCP/IP** interface opens the telemetry of **RVR** equipments to the Internet world.

Designed in order to connect to an ADSL router or to a LAN network with server DHCP internet function any **RVR** equipment predisposed for the telemetry with TELECON via RS232.

It uses a powerful 16bit DSP Bit of 52MIPS and it is equipped with standard power supply input.

It realizes the telemetry remotely through a "tunnel" in Internet network, or a local LAN network in standard **TCP/IP** protocol.

Every equipment is identified from a owner static address (for example 192.168.0.244) or through a DNS server can be identified from a name (for example RADIO RVR ELETTRONICA).

The address is connected as DHCP client.

The security is guaranteed in the access through LOGIN with User ID and Password; moreover it is guaranteed through 2 levels password (User and Administrator).

E-mail messages: the alarms come signal to you by e-mail. The start and stop commands are given from outside through e-mail (SMTP).

FTP server: data transfer process.

It is possible to give enabling or disabling commands to the equipment, read values of power etc.

TELINK

The **TELINK** is an interface endowed with a microcomputer with risc microprocessor and an operating system specialized resident RTOS in the simultaneous management of data that transit throught 4 serial ports.

The **TELINK** opens the channel of telemetry standard **RVR**, available on connector DB9 and normally connected to the Telecon32 or to the modem, to systems of telemetry of station of high-level what ANTLAN, BURK, SNMP.

Besides it has a Web resident Server that allows to be connected online ethernet and explored by a normal browser type explorer or similar (function HTML). Besides it supports the messages e-mail to signal errors of system. The protocols TCP/IP, Telnet, http, SNMP, XML/RSS, HTTPS/SSL/SSH is managed by a DSP to 120Mhz inside to the **TELINK**.

The door Web Server can be connected online internet and medium a link dns the **TELINK** can be questioned with an univocal name of station rather than the IP address (example: from internet radio_rvr_spa.it rather than xxx.xxx.xxx.xxx).

The **TELINK** is contained in a screening metallic playpen to easily install on bar omega or 1 unit rack for the **TELINK-SNMP2** version. All the signals and the feeding are endowed with connectors for a rapids substitution.

The feeding is galvanic isolated and the signals filtered for having a high immunity from the radio frequency troubles. The fuse is restoring auto and the entry it foresees a varistore of protection from the extratensionis. The retention of the data in memory dates is done with maxi life boundless capacitor rather than batteries to the NiCd that they ask for maintenance in the time.

In the façade there are nine led for a complete synoptic on the traffic of the serial lines and the diagnosis of the

typology of error with three red led. **TELINK** is endowed with watchdog hardware for automatic reset in case of anomalous stop of the processor or lowering under the limit of the tension of feeding.
The **TELINK** is endowed with a formality "simulation" that it allows to a system ANTLAN or BURK to regularly be connected to the **TELINK** reading some virtual (test of the protocol and the net) values.

Telemetry interface



TELINK-SNMP2 Interface

Functional specifications

Working parameters management

- Telecon software connection
- All working parameters reading
- ON/OFF state management
- Change transmitter power management
- Nominal and low power state management
- Mains and alarm management
- Custom alarms management
- Electromechanical telecontrol and telealert
- Modem GSM (/MODGSM) support
- Modem PSTN Fixed-line (/MODPSTN) support

SMS alert

- SMS alarms alert
- SMS alarms restore alert
- Receive commands via SMS
- Registration identification data and SMS sending
- Alarms alert through data call

Interface controls

- WEB interface support (TCPIP-INT series)
- SNMP interface support (TELINK-SNMP2)
- ANTLAN & BURK interface support (TELINK-C1)

On board telemetry without modem (TLC)	On board telemetry with GSM modem	External customizable telemetry TLC2000 Professional series	External customizable telemetry TLC300/T2 Easy maintenance model	External telemetry without GSM modem RDMODSER-FM Professional model
✓	✓	✓	✓	✓
✓	✓			✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓			✓
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		✓	✓	
✓	✓	✓	✓	✓
	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓			✓
✓	✓	✓	✓	✓
				✓
✓	✓	✓	✓	✓
✓				✓
✓		✓	✓	✓
✓		✓	✓	✓

External telemetry with GSM modem R DMODGSM-FM Pro fessional series	Telemetry and changeover SCMLC D1+1 Series for double exciters transmitters	Telemetry and changeover SCMLC DN+1 series for multi transmitters	Telemetry and changeover SCMLC D1+1 T CS model for double exciters transmit	Telemetry and changeover SCM 6/1 model for multi transmitters
✓	✓	✓	✓	
✓				
✓	✓	✓	✓	✓
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	✓	✓	✓	

Telemetry unit & telemetry interface technical specification

	TLC 300/T2	TLC 2000/(T1...T6)	RDMODSER-FM RD MODGSM-FM
Parameters	Values	Values	Values
GENERALS			
Primary Power		100 – 120 – 220 – 240 VAC ±1 5% or 24 VDC	115 / 230 VAC ±15%
Phisical Dimensions (W x H x D)	483 x 44 x 263 mm	483 x 88 x 263 mm	483 x 44 x 263 mm
Weight	4,3 kg	7 kg	6,5 kg
Environmental worki ng temperature	-10 to + 50 °C		
Cooling	Forced with internal fans		
INPUT			
Analog	8 analog inputs for each T card maximum 2 cards	8 analog inputs for each T card maximum 6 cards	
Digital/Analog	16 digital inputs for each T car d maximum 2 cards	16 digital inputs for each T card maximum 6 cards	
OUTPUTS			
Relay	8 Relayoutputs for each T card maximum 2 T cards	8 Relayoutputs for each T card maximum 6 T cards	
INTERFACE			
RS232	Yes		
RS485			Yes
IIC BUS	Yes		
RJ 45 (LAN)			
STANDARD COMPLIANCE			
Safety	EN60215:1997		
EMC	EN 301 489-11 V1.4.1		
Spectrum Optimizati on			EN 301 511 V9.0.2

All pictures are RVR's property and they are only indicative and not binding. The pictures can be modified without notice.

These are general specifications. They show typical values and are subject to change without notice.

Ordering information



Img.1



Img.2



Img.3



Img.4



Img.5



Img.6



Img.7



Img.8

Telemetry unit version			
	Code	Description	HE Unit
	RDMODSER-FM	Telemetry unit fully digital for single exciter – without modem	1 HE
Img.1	RDMODGSM-FM	Telemetry unit fully digital for single exciter	1 HE
Img.2	TLC300/T2	Telemetry unit with Nr 1 I/O base card on board	1 HE
Img.3	TLC2000/T1	Professional telemetry unit with Nr 1 I/O base card on board	2 HE
Img.4	TLC2000/T2	Professional telemetry unit with Nr 1 I/O additional card on board	2 HE
Img.5	TLC2000/T3	Professional telemetry unit with Nr 2 I/O additional cards on board	2 HE
Img.6	TLC2000/T4	Professional telemetry unit with Nr 3 I/O additional cards on board	2 HE
Img.7	TLC2000/T5	Professional telemetry unit with Nr 4 I/O additional cards on board	2 HE
Img.8	TLC2000/T6	Professional telemetry unit with Nr 5 I/O additional cards on board	2 HE

TCPINT-PTX-16 TCPIPINT-DDS TCPINT-TEX	TELINK-C1	TELINK-SNMP2
Values	Values	Values
	10-30 V DC	230 VAC ±15%
73 x 33 x 95 mm	150 x 40 x 100 mm	483 x 44 x 300 mm
0,3 kg	0,8 kg	4 kg
-10 to + 50 °C		
Yes		
Yes		
Yes		Yes
EN60215:1997		
EN 301 489-11 V1.4.1		

CE 99/5/CE Revision: 03/10

Telemetry interface		
Code	Description	HE Unit
TCPIPINT-PTX-16	Web interface for PTX 16 bit exciter series	Box
TCPIPINT-DDS	Web interface for PTX DDS exciter series	Box
TCPIPINT-TEX	Web interface for TEX exciter series	Box
TELINK-C1	Interfaccia di telemetria protocollo ANTLAN/BURK	Box
TELINK-SNMP2	Interfaccia di telemetria RVR/SNMP	1 HE



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ISO 9001:2000 certified since 2000



Documents / Resources



[Broadcast TLC2000-T Telemetry and Changeover](#) [pdf] Owner's Manual
TLC2000-T Telemetry and Changeover, TLC2000-T, Telemetry and Changeover, Changeover

References

- [R.V.R. Elettronica - Broadcast Systems](#)

Manuals+.