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**MOBILE  
DIGITAL  
MICROWAVE  
LINKS**



## PRINCIPALI CARATTERISTICHE:

- > Alta qualità ed affidabilità.
- > Costruzione modulare.
- > 20 canali presintonizzati
- > Cambio di frequenza istantaneo.
- > Rapidità di montaggio e messa in funzione.
- > Disponibili in versione mono o bidirezionale.
- > Eccellente figura di rumore.
- > Rispondente alle specifiche ETS 300 421 (DVB-S) e ETS 300 429 (DVB-C).
- > Ingressi ASI doppi con commutazione automatica integrata.
- > Payload fino a 60 Mbits/s (DVB-S) e 155 Mbits/s (DVB-C).
- > Adattatore di rete integrato.
- > Display digitale multifunzione.
- > Basso consumo.
- > Alimentazione da rete o a batterie.



## DCM 8514-30 10 GHz MOBILE DIGITAL MICROWAVE LINK

### MAIN FEATURES:

- > High quality and reliability.
- > Modular construction.
- > 20 pretuned channels.
- > Instantaneous frequency switch.
- > Rapid assembly and entry into operation.
- > Available in mono or bidirectional version.
- > Excellent noise figure.
- > Complies with ETS 300 421 (DVB-S) and ETS 300 429 (DVB-C) specifications.
- > Double ASI input with integrated automatic switch-over.
- > Payload up to 60 Mbits/s (DVB-S) and 155 Mbits/s (DVB-C).
- > Integrated network adapter.
- > Multifunction digital display.
- > Low power consumption.
- > Mains or battery-fed power supply.

### CARACTERÍSTICAS PRINCIPALES:

- > Gran calidad y confiabilidad.
- > Construcción modular.
- > 20 canales presintonizados.
- > Cambio de frecuencia instantáneo.
- > Rapidez de montaje y puesta en funcionamiento.
- > Disponibles en versiones mono o bidireccionales.
- > Excelente figura de ruido.
- > Cumple con las normas ETS 300 421 (DVB-S) y ETS 300 429 (DVB-C).
- > Entradas ASI dobles con conmutación automática integrada.
- > Payload hasta 60 Mbits/s (DVB-S) y 155 Mbits/s (DVB-C).
- > Adaptador de red integrado.
- > Display digital multifunciones.
- > Bajo Consumo.
- > Alimentación de corriente alterna (A.C.) o por baterías.

Prodotti in diverse gamme di frequenza, i ponti microonde di questa serie dispongono di tecnologia a doppia conversione e di oscillatori sintetizzati che permettono il cambio di canale (20 presintonizzati) dalla testata RF.

Sulla console interna un display multifunzione permette di visualizzare i parametri di funzionamento dell'apparato.

La capacità standard dei ponti è di 34 Mbits/s, ma può raggiungere, a seconda delle opzioni e del tipo di modulazione (QPSK o QAM), livelli fino a 155 Mbits/s.

La meccanica esterna di supporto è prevista per l'alloggiamento di 2 unità riceventi e/o trasmettenti che permettono quindi le seguenti configurazioni: RX + RX, TX + TX, TX + RX consentendo di raddoppiare la capacità del ponte stesso, o di realizzare collegamenti bi-direzionali.

Sulla unità RF esterna, sia ricevente che trasmittente, sono presenti i pulsanti piezoelettrici a tenuta stagna per il cambio canale e due display ad alta efficienza che visualizzano il canale e la frequenza di funzionamento ed il livello di potenza in uscita o il livello RF in ingresso così da facilitare le operazioni di puntamento del sistema.

*Produced in various frequency ranges, these microwave links are equipped with double conversion technology and synthesized oscillators which enable 20 pretuned channels to be changed from the RF head.*

*On the internal console, a multifunction display allows visualization of the operating parameters of the unit.*

*The standard capacity of the link is 34 Mbits/s, but may reach up to 155 Mbits/s depending on the options and the type of modulations (QPSK or QAM).*

*The external mechanical support is designed to house two receiving and/or transmitting units which therefore allows the following configurations: RX + RX, TX + TX, TX + RX. This makes it possible either to double the capacity of the link itself or to produce bidirectional connections.*

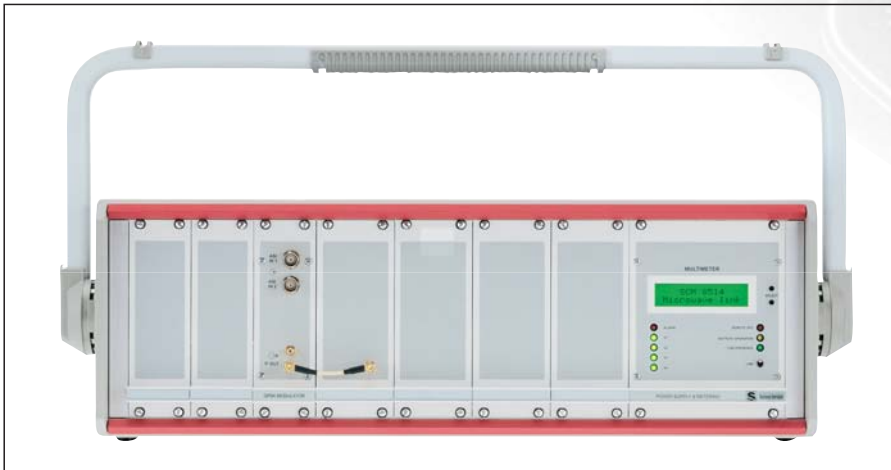
*On the external RF unit, whether receiving or transmitting, are present the sealed piezoelectric pushbuttons for channel changing and two high-efficiency displays showing the channel and operating frequency and the output power level or RF input level so as to facilitate the system's tracking operations.*

## MODEL-SPECIFIC DATA

Model	Output frequency band (max. tuning band 200 MHz)	digital output power (rms) (regrowth -40 dB)
DCM 1438-33	1.4 - 3.8 GHz	0.5 W
DCM 8514-30	8.5 - 14.5 GHz	0.25 W
DCM 1719-13	17 - 19 GHz	5 mW
DCM 2123-17	21 - 23.6 GHz	12 mW

Other features and frequencies available on request.

Specifications and characteristics are subject to change without notice.



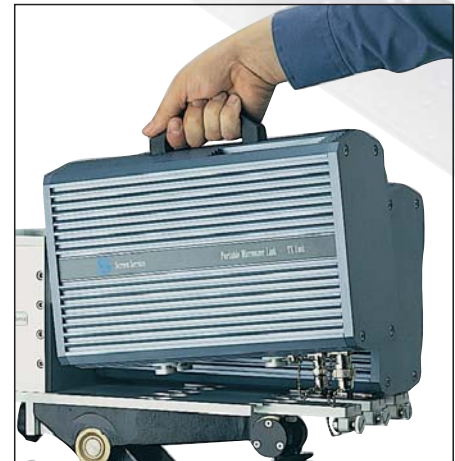
**DCM SERIES DIGITAL MODULATOR UNIT**



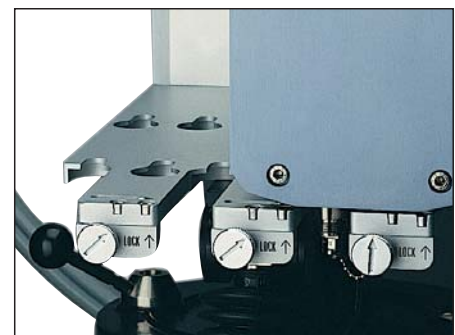
**DCM SERIES DIGITAL DEMODULATOR UNIT**



**DCM SERIES RF OUTDOOR UNIT**



**RF OUTDOOR UNIT QUICK MOUNTING KIT  
FIXING SYSTEM**



**DETAIL OF RF OUTDOOR UNIT  
MECHANICAL ASSEMBLY SYSTEM**



**DETAIL OF SHF HEAD DISPLAYS**

Fabricados con varias gamas de frecuencia, los enlaces microondas de esta serie disponen de tecnología de doble conversión y osciladores sintetizados que permiten cambiar de canal (20 presintonizados) desde la unidad exterior.

En la consola interna un display multifunción permite visualizar los parámetros de funcionamiento del aparato.

La capacidad estándar de los enlaces es de 34 Mbits/s, pero, según las opciones y el tipo de modulación (QPSK o QAM), puede alcanzar niveles de hasta 155 Mbits/s.

La mecánica exterior de soporte está prevista para

alojar 2 unidades receptoras y/o transmisoras que permiten las configuraciones siguientes: RX + RX, TX + TX, TX + RX, lo que posibilita duplicar la capacidad del enlace mismo, esto es, realizar conexiones bi-direccionales.

En la unidad exterior RF, tanto receptora como transmisora, se encuentran los pulsadores piezoeléctricos herméticos para cambiar canal y una pantalla muy eficiente que visualiza el canal y la frecuencia de funcionamiento, así como el nivel de potencia en salida, o el nivel RF en entrada, para facilitar las operaciones de orientación del sistema.

### TECHNICAL CHARACTERISTICS

#### SHF HEADS

Number of pre-tuned channels	20
Max. tuning band	200 MHz
Up/down conversion	Agile (double conversion)
Frequency stability	±15 ppm
Spurious emissions	< -65 dB
Receiver noise figure	< 5 dB
A.G.C. dynamic	> 50 dB
Receiver threshold	Better than -80 dBm

#### INTERMEDIATE FREQUENCY

I.F. frequency	70 MHz
I.F. output level	-15 dBm rms, 75 Ω
I.F. input level	-15 dBm rms, 75 Ω
Return loss	> 23 dB
I.F. bandwidth	From 1 to 40 MHz (according to mod/dem settings)

#### QPSK MODULATOR

Modulation	QPSK (DVB-S compliant)
Inputs	2 x ASI, BNC, 75 Ω or 1 x LVDS, Sub-D 25, 100 Ω
Payload	Up to 34 Mbits/s (DCB 80x series) Up to 60 Mbits/s (DCB 81x series)
Network adapter	Internal
Code rates (FEC)	1/2, 2/3, 3/4, 5/6, 7/8
Roll-off	0.35
Bandwidth	1.75 to 28 MHz, software selectable (DCB 80x series) 1 to 40 MHz, software selectable (DCB 81x series)
Genlock mode	DCB 81x series only
Null packet insertion and deletion	DCB 81x series only
Error packet insertion	DCB 81x series only
Control and monitoring	Extensive front panel control Local terminal on RS-232
Remote control and monitoring (option)	Web based Java interface

#### QAM MODULATOR

Modulation	16, 32, 64, 128, 256 QAM (DVB-C compliant)
Inputs	2 x ASI, BNC, 75 Ω or 1 x LVDS, Sub-D 25, 100 Ω 2 x G703 (optional)
Payload	Up to 34 Mbits/s, standard Up to 155 Mbits/s, optional
Network adapter	Internal
Roll-off	0.15 - 0.35 (selectable)
Bandwidth	Up to 8 MHz, standard Up to 28 MHz, optional
Control and monitoring	Extensive front panel control Local terminal on RS-232
Remote control and monitoring	Web based Java interface Telnet access via Ethernet

#### QPSK DEMODULATOR

Modulation	QPSK (DVB-S compliant)
Payload	Up to 34 Mbits/s (optional up to 60 Mbits/s)
Network adapter	Internal
Code rates (FEC)	1/2, 2/3, 3/4, 5/6, 7/8
Roll-off	0.35
Bandwidth	1 to 40 MHz (software selectable)
Outputs	2 x ASI, BNC, 75 Ω or 1 x LVDS, Sub-D 25, 100 Ω
Control and monitoring	Extensive front panel control Local terminal on RS-232

#### QAM DEMODULATOR

Modulation	16, 32, 64, 128, 256 QAM (DVB-C compliant)
Payload	Up to 34 Mbits/s, standard Up to 155 Mbits/s, optional
Network adapter	Internal
Roll-off	0.15 - 0.35 (selectable)
Bandwidth	Up to 8 MHz, standard Up to 28 MHz, optional
Outputs	2 x ASI, BNC, 75 Ω or 2 x G703 (optional)
Control and monitoring	Extensive front panel control Local terminal on RS-232

#### GENERAL

Operating temperature	-10°C to +45°C
Maximum relative humidity	90%, non condensing
Maximum operating altitude	2500 m a.s.l. (> 2500 m on request)
Power supply	90 to 264 V AC, 48 V DC (16-32 V DC optional)



## Screen Service

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